



# RISEUP

REVITALISING LANGUAGES AND SAFEGUARDING CULTURAL DIVERSITY

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## D6.1 User engagement and gamification concept in the domain of endangered languages



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## Executive Summary

The D6.1 deliverable, titled "User Engagement and Gamification Concept," represents the digital toolkit in the RISE UP project, specifically focusing on the integration of gamification strategies to enhance user engagement in the context of revitalizing endangered languages. This document outlines a comprehensive approach, leveraging the captivating power of gamification [1] to transform language learning from a conventional chore to an enjoyable, interactive experience. The primary aim is to stimulate interest and participation, particularly among younger generations, vital for the popularization and propagation of these languages.

At its core, the concept employs a dynamic blend of game-design elements in non-game contexts, a methodology proven to significantly boost user engagement. By incorporating aspects such as point scoring, competition, rules of play, and interactive storytelling into the language learning process, the RISE UP project endeavours to foster a more immersive and motivational learning environment. This strategy is not just about learning a language; it's about immersing learners in the cultural and historical contexts that these languages represent.

The document delves into the specific gamification techniques that are feasible and effective for the RISE UP project. These include progression levels mirroring language mastery, a points and experience system, badges for cultural and linguistic achievements, daily and weekly challenges, personalized learning paths, and leaderboards for friendly competition. Each of these elements is carefully designed to not only educate but also to celebrate the unique cultural heritage each language embodies. The concept also emphasizes the importance of community and social engagement features, allowing users to connect, share achievements, and engage in language exchange, thereby fostering a supportive learning network.

The strategy outlined in the deliverable takes into consideration the diverse and broadly defined target groups associated with minoritized language communities. It stresses the need for universal design principles, cultural sensitivity and inclusivity, flexible and customizable options, and adaptive learning systems. The design ensures that the gamification experience is accessible, engaging, and relatable by people of different ages, genders, and cultural backgrounds.

A notable aspect of this concept is its adaptive nature, allowing for regular assessment and iteration based on user feedback. This approach ensures that the gamification elements remain effective, relevant, and aligned with the evolving needs of the users. The document also highlights the importance of accessible design, ensuring that the platform is approachable for people with various types of impairments.

This deliverable acts as a starting point for the development of the RISE UP toolkit and the strategies to be used in the toolkit to maximise impact on the revitalisation of the endangered languages targeted.

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## Acronyms & Abbreviations

Term	Description
GDPR	General Data Protection Regulation
LARA	Literacy and Reading Acquisition
CI	Computing interface
UI	User interface
UX	User Experience

# 1 Introduction

## 1.1 Overview

The scope of this deliverable is to outline the overarching strategy for integrating gamification principles within the context of endangered languages. The goal is to enhance user engagement and participation through innovative and interactive gamification methods. This deliverable provides a comprehensive framework that seeks to address the needs of endangered language communities and also leverages the engaging aspects of game design to foster a deeper and more sustained interaction with these languages.

## 1.2 Relation to other tasks and deliverables

This deliverable is related to the following other RISE UP tasks and deliverables:

### Receives inputs from:

Table 1. D6.1 Input from other tasks and deliverables

Deliverable	Due Date	Input for D6.1
D4.1	31.01.2024	Various tools collected that can be integrated into the digital Toolkit.

### Provides outputs to:

Table 2. D6.1 Output for other tasks and deliverables

Deliverable	Due Date	Output from D6.1
D6.2	31.01.2025	Various UI/UX Designs, architecture and the tools developed.

## 1.3 Structure of the deliverable

The deliverable follows a linear structure with the 2 major sections with the following section breakdowns:

Section 2: This section focuses on the various tools developed for language revitalization and safeguarding cultural diversity. It provides a comprehensive overview of these influential tools, detailing their value propositions, technical aspects, and how they integrate with the RISE UP toolkit. The section also investigates various digital tools for language learning which could provide inputs to the RISE UP toolkit.

Section 3: This section focuses on elaborating the various gamification techniques feasible for the RISE UP project. These techniques include elements like progression levels reflecting language mastery,

points and experience systems, badges for cultural and linguistic achievements, and other engaging features to enhance the language learning experience. The section also focuses on the various tools and the forum to be built in the scope of the digital toolkit.

Section 4: This section provides the conclusion of the deliverable and the next steps.

## 2 Existing tools and technologies

### 2.1 Existing tools

In the realm of language revitalization and safeguarding cultural diversity, myriad tools have been developed and utilized. This section delves into the existing tools that have been influential in this domain. It aims to provide a comprehensive overview of these tools, highlighting their value propositions, technical aspects, and how they integrate with the RISE UP toolkit.

#### 2.1.1 Duolingo - Navajo

##### 2.1.1.1. Value proposition of the tool for the user

Duolingo's Navajo course is a ground-breaking step in the revitalization of endangered languages. It brings the beauty and complexity of the Navajo language to a global audience, offering a free, accessible, and engaging platform. This course allows users from all backgrounds to contribute to the revitalisation of Navajo culture while acquiring a unique linguistic skill.

##### 2.1.1.2. Technical overview of the tool

The course structure in Duolingo includes a combination of listening exercises, translation tasks, and multiple-choice questions. Its user-friendly interface is supported by gamification elements like points, levels, and daily streaks, which foster a motivating learning environment. The lessons are concise, making them suitable for busy schedules.

##### 2.1.1.3. Integration with the RISE UP tool kit

Integrating Duolingo's methodology into RISE UP would involve creating similar language courses with engaging, bite-sized lessons. This approach could significantly enhance user engagement and contribute to the preservation of endangered languages within the RISE UP framework.

#### 2.1.2 Living Dictionaries

##### 2.1.2.1. Value proposition of the tool for the user

Living Dictionaries serve as a crucial tool for documenting and sharing lesser-known languages, especially those that are endangered or lack written resources. They empower communities to store their linguistic heritage and provide linguists and language enthusiasts with a valuable resource for research and learning.

##### 2.1.2.2. Technical overview of the tool

These web-based tools offer functionalities like word search, entry addition, and sharing capabilities. They are designed to be user-friendly and accessible on various devices, encouraging widespread community participation. Additionally, they support multimedia entries, enhancing the learning experience with audio and visual aids.

### 2.1.2.3. Integration with the RISE UP tool kit

By incorporating Living Dictionaries into RISE UP, users can access a rich repository of language resources. This integration could facilitate community-driven language documentation and learning, enriching the RISE UP platform with diverse linguistic content.

## 2.1.3 H5P

### 2.1.3.1. Value proposition of the tool for the user

H5P stands out as a versatile tool for creating interactive online content. Its application in language learning and cultural education can significantly enhance user engagement and retention. Users can create, share, and modify interactive content, making it a collaborative and dynamic learning tool.

### 2.1.3.2. Technical overview of the tool

H5P offers a range of content types like interactive videos, quizzes, and presentations. These tools are easily embeddable in websites and Learning Management Systems (LMS), offering flexibility and ease of use. The platform supports HTML5, ensuring compatibility across various devices and browsers.

### 2.1.3.3. Integration with the RISE UP tool kit

H5P's interactive content creation capabilities can be integrated into the RISE UP platform to develop engaging, customized learning activities. This could include cultural quizzes, language exercises, and interactive storytelling, enriching the user experience and fostering deeper learning.

## 2.1.4 Transparent Language

### 2.1.4.1. Value proposition of the tool for the user

Transparent Language's collaboration with "7000 languages" offers a unique opportunity for language learners to access resources in less commonly taught languages. This initiative supports language preservation and promotes cultural understanding by providing comprehensive learning tools for a wide range of languages.

### 2.1.4.2. Technical overview of the tool

The platform includes diverse learning materials, such as vocabulary drills, grammar lessons, and cultural insights. Its interactive online interface offers personalized learning paths, progress tracking, and speech recognition tools to enhance pronunciation.

### 2.1.4.3. Integration with the RISE UP tool kit

Incorporating Transparent Language's resources into RISE UP could provide users with a broad spectrum of language learning materials. This integration would be especially beneficial for endangered languages, offering structured and interactive learning modules.

## 2.1.5 Memrise

### 2.1.5.1. Value proposition of the tool for the user

Memrise excels in making language learning enjoyable and effective through its unique approach that combines memorization techniques with real-life language use. It's particularly effective for building a robust vocabulary, offering courses in a wide range of languages, including endangered ones.

### 2.1.5.2. Technical overview of the tool

The platform uses spaced repetition and mnemonic techniques, augmented with real-life video and audio clips from native speakers. This immersive approach helps users understand how language is used in everyday contexts. The learning experience is further gamified with points and leaderboards, enhancing user engagement.

### 2.1.5.3. Integration with the RISE UP tool kit

Memrise's focus on real-life language use and its effective memorization techniques can be incorporated into RISE UP's community module. This would offer users an immersive and practical approach to learning endangered languages, boosting both retention and engagement.

## 2.1.6 Anki

### 2.1.6.1. Value proposition of the tool for the user

Anki is renowned for its effectiveness in language learning, particularly in memorization and recall of vocabulary and phrases. Its strength lies in its customization; users can create decks tailored to their specific learning needs, making it a highly versatile tool for language learners of all levels.

### 2.1.6.2. Technical overview of the tool

Anki utilizes proprietary algorithms such as a spaced repetition algorithm to optimize memory retention. Users can create their own flashcards or download shared decks. The platform supports multimedia additions like images and audio, enhancing the learning experience. Its flexibility makes it suitable for a wide range of learning styles and objectives.

### 2.1.6.3. Integration with the RISE UP tool kit

Anki's methodology can be adapted to create personalized learning experiences within the RISE UP platform. Customizable flashcard decks for various endangered languages can be developed, allowing users to learn at their own pace and according to their individual learning preferences.

## 2.1.7 Rosetta Stone

### 2.1.7.1. Value proposition of the tool for the user

Rosetta Stone offers a fully immersive approach to language learning, emphasizing naturalistic learning methods. This approach mirrors the way individuals learn their first language, making it intuitive and effective for learners of all ages. It focuses on building foundational language skills through context and visual cues.

### 2.1.7.2. Technical overview of the tool

The platform uses image-word associations, interactive dialogues, and advanced speech recognition technology to create a natural learning environment. Lessons are structured to progressively build language skills, with a strong emphasis on pronunciation and conversational ability. The interface is user-friendly, providing a seamless learning experience.

### 2.1.7.3. Integration with the RISE UP tool kit

Integrating Rosetta Stone's immersive learning methodology into RISE UP could provide an intuitive and natural way for users to engage with endangered languages. This could include developing context-based learning modules and interactive exercises that mimic real-life language use.

## 2.1.8 C-LARA (ChatGPT enabled Literacy and Reading Acquisition)

### 2.1.8.1. Value proposition for the user

C-LARA is a pioneering tool designed to aid in the acquisition of literacy and reading skills, particularly in the context of less commonly taught languages. This tool is especially significant for communities where access to quality language learning resources is limited. C-LARA's approach is rooted in making literary texts accessible and engaging, fostering a deeper appreciation, and understanding of language and culture.

### 2.1.8.2. Technical overview of the tool

Accessible at C-LARA's website<sup>1</sup>, the tool focuses on transforming literary texts into language learning material. It employs advanced natural language processing techniques to annotate texts with linguistic information, making them more approachable for learners. The platform supports a variety of languages and provides features like word-by-word translation, audio narration, and comprehension exercises. Its interface is designed to be intuitive, catering to both beginners and advanced learners.

### 2.1.8.3. Integration with the RISE UP tool kit

RISE UP toolkit can adhere to a similar approach later to enable CI assisted storytelling for language learning. This can be based on the folklores for the various language communities, hence increasing the immersiveness of the learners in the culture and not just the language of the community.

## 2.2 Existing gamification technologies and methods used.

In this section, we explore various gamification technologies and methods that have been effectively used in the domain of language revitalization and learning. The focus is on understanding how these technologies engage users, promote learning, and can be potentially integrated into the RISE UP project.

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<sup>1</sup> <https://www.unige.ch/callector/lara>



## 2.2.1 Points and Rewards Systems

### 2.2.1.1. How it is used for language revitalisation or learning

Points and rewards systems are fundamental gamification techniques widely used in language learning platforms. They involve awarding points to users for completing tasks, lessons, or challenges. These points often correspond to rewards or levels, creating a sense of achievement and progression.

### 2.2.1.2. Integration with RISE UP

Integrating a points and rewards system into RISE UP can significantly enhance user engagement. By setting clear goals and providing tangible rewards for language learning activities, it could foster a more motivating and enjoyable learning experience.

## 2.2.2 Leaderboards

### 2.2.2.1. How it is used for language revitalisation

Leaderboards introduce a competitive element to learning by ranking users based on their performance or points earned. This method encourages users to engage more with the learning material to improve their ranking.

### 2.2.2.2. Integration with RISE UP

Implementing leaderboards in RISE UP could stimulate competition and social interaction among users. It can create a community of learners who are motivated to excel in their language learning journey.

## 2.2.3 Achievement Badges

### 2.2.3.1. How it is used for language revitalisation

Achievement badges are used to recognize and celebrate milestones in the learning process. They serve as visual symbols of accomplishments, providing users with a sense of pride and achievement.

### 2.2.3.2. Integration with RISE UP

Incorporating achievement badges in RISE UP can provide users with a sense of accomplishment as they progress through language courses. Badges can be awarded for various achievements, such as completing a difficult lesson, maintaining a learning streak, or participating in community activities.

## 2.2.4 Storytelling and Narrative Elements

### 2.2.4.1. How It Is Used for Language Revitalization or Learning

Storytelling and narrative elements make language learning more engaging and immersive. By incorporating language lessons into stories or scenarios, users can learn in a context that is more meaningful and enjoyable.

### 2.2.4.2. Integration with RISE UP

The RISE UP platform can integrate storytelling elements to teach languages. This could involve creating narrative-based lessons where language skills are developed as part of a larger story, making

the learning process more engaging and memorable. The storytelling can also be integrated with folklores from various communities.

### 2.2.5 Interactive Challenges

#### 2.2.5.1. How It Is Used for Language Revitalization

Interactive challenges involve users in tasks that require active participation, such as speaking exercises, writing tasks, or real-world language use challenges. These activities make learning more hands-on and practical.

#### 2.2.5.2. Integration with RISE UP

Implementing interactive challenges in RISE UP could enhance practical language skills. Challenges could be designed to encourage users to apply their language skills in real-life scenarios, thus reinforcing their learning.

### 2.2.6 Social Learning and Community Challenges

#### 2.2.6.1. How It Is Used for Language Revitalization

Social learning involves collaborative tasks or challenges where users interact with each other. Community challenges can foster a sense of belonging and encourage learning through peer support and collaboration.

#### 2.2.6.2. Integration with RISE UP

Integrating social learning aspects into RISE UP could include features like language exchange programs, group challenges, and specifically forums for discussion. This approach would not only enhance language skills but also build a community around language revitalization efforts.

## 3 RISE UP Gamification and Digital toolkit concept

### 3.1 General overview of gamification concepts

Gamification is gaining traction in various domains, particularly in learning and user engagement, intertwines the mechanics of gaming with non-game environments to boost motivation, enhance participation, and enrich the learning experience. This approach leverages elements typically found in games—such as points, levels, challenges, and rewards—to create an engaging and interactive environment for users. The essence of gamification lies in its ability to transform routine tasks into more enjoyable and engaging activities, thereby increasing motivation, and improving task performance.

In the context of language learning and cultural education, as explored in RISE UP, gamification can play a pivotal role. By incorporating game-like elements, learners are more likely to engage with the material, retain information, and enjoy the process of learning. Points and leaderboards, for instance, can foster a healthy sense of competition and achievement. They motivate learners to engage more deeply with the content and track their progress in a tangible way. Badges and achievements serve as milestones, celebrating the learners' progress and keeping them motivated.

Furthermore, challenges and quests can be used to present language learning content in an exciting and context-rich manner. These elements, when combined with storytelling, can immerse learners in culturally relevant scenarios, enhancing both linguistic and cultural comprehension. This immersion is particularly effective for language revitalisation, as it allows learners to experience the language within its cultural context, making the learning process more meaningful and memorable.

The concept of personalized learning paths within gamification frameworks further tailors the experience to individual needs. By using adaptive learning algorithms, platforms can adjust the difficulty and type of content based on the learner's performance, ensuring that each user is challenged appropriately and remains engaged.

Additionally, social aspects of gamification, such as collaborative tasks or community challenges, provide opportunities for peer learning and support. These social interactions not only enhance learning outcomes but also build a community around the language or subject matter, contributing to a greater sense of belonging and shared purpose.

In essence, gamification in learning, especially in RISE UP, is not just about making learning fun; it's about creating a rich, interactive, and personalized environment that motivates and engages learners, encourages continuous participation, and fosters a deeper connection with the learning material. Through its multifaceted approach, gamification holds the potential to transform the educational landscape, making learning more effective, enjoyable, and accessible.

## 3.2 RISE UP Gamification framework

### 3.2.1 Overview

#### 3.2.1.1. Users and Profiles

In RISE UP, each user creates a personalized profile which acts as a learning hub. This profile tracks individual progress, adapts content to learning style, and suggests activities based on user performance. It uses data analytics to offer personalized language tasks, ensuring that each user's experience is tailored to their specific learning curve and language goals.

#### 3.2.1.2. Data security and management

RISE UP toolkit employs end-to-end encryption and secure data protocols to protect user information. User data, including learning progress and personal details, is stored in a secure cloud environment with regular backups and stringent access controls, ensuring confidentiality and data integrity.

#### 3.2.1.3. User device requirements

Designed for inclusivity, RISE UP is accessible on most smartphones - ensuring a consistent and quality experience. The platform automatically adjusts to different screen sizes and resolutions, ensuring that all functionalities are available regardless of the device used.

#### 3.2.1.4. User interface

The RISE UP platform is designed with a user interface (UI) that adheres to the best practices in UI/UX design, ensuring an intuitive, engaging, and accessible experience for all users. The UI is the bridge between the user and the digital environment of language learning; hence its design is crucial for effective engagement and ease of use.

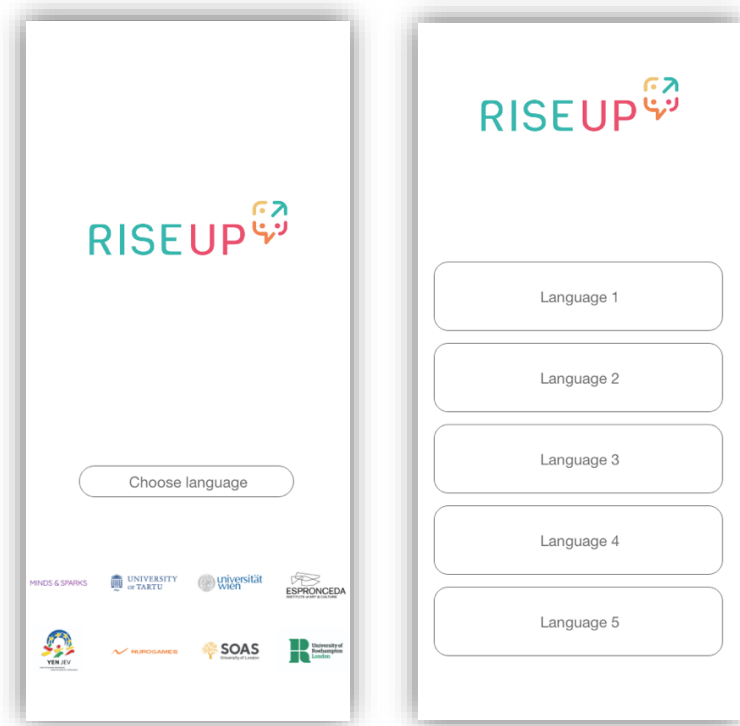
##### 3.2.1.4.1. Concepts used for RISE UP UI Design

- **Simplicity:** The RISE UP UI maintains a clean and uncluttered design, focusing on simplicity to reduce cognitive load. Essential elements are prioritized, and the layout is intuitive, allowing users to navigate the platform with ease.
- **Consistency:** Elements such as colour schemes, font styles, and button shapes are consistent throughout the platform, creating a cohesive and predictable experience. This consistency extends to the placement of navigation elements, ensuring that users can quickly learn and remember how to navigate the platform.
- **Accessibility:** The design adheres to accessibility standards to cater to a diverse range of users, including those with visual disabilities. This includes colour contrast ratios for readability, screen reader compatibility, and scalable text and images.
- **Feedback and Responsiveness:** Interactive elements provide immediate feedback to user actions. This could be in the form of visual cues, such as highlighting a button when hovered over, or auditory feedback for certain actions. The platform is optimized for performance, ensuring quick load times and smooth transitions.

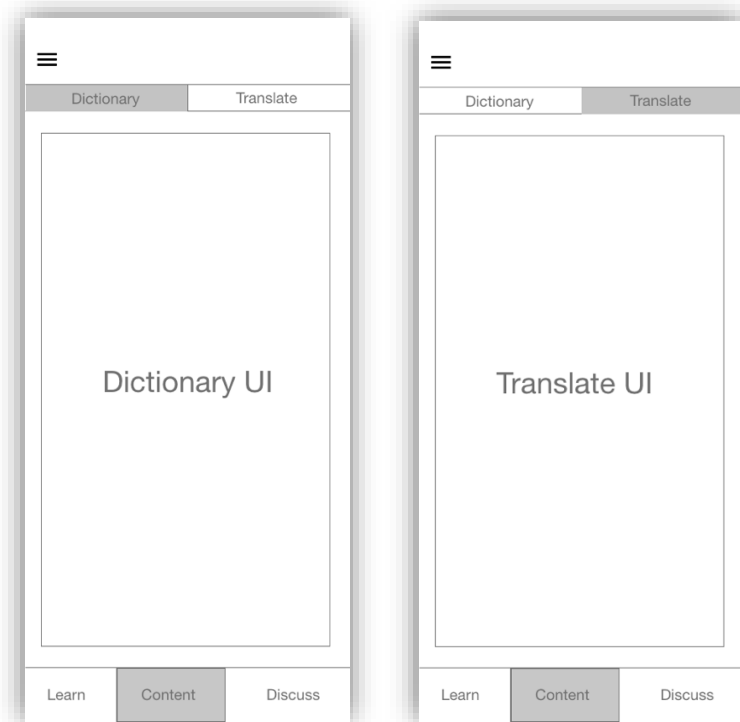
- **Visual Hierarchy:** Key information and actions are presented with a clear visual hierarchy, guiding users naturally through their learning journey. Important elements are made to stand out using size, colour, and positioning.
- **User-Centric Design:** Understanding the target audience's preferences and needs is key. The RISE UP UI is crafted after extensive user research, ensuring that the layout, icons, and interactions align with the expectations and comfort of the language learners and non-digital natives.
- **Adaptive and Responsive Design:** The UI is responsive, meaning it adapts seamlessly to different devices and screen sizes. This ensures a consistent and functional experience regardless of how users access the platform.

#### 3.2.1.4.2. UI Wireframes

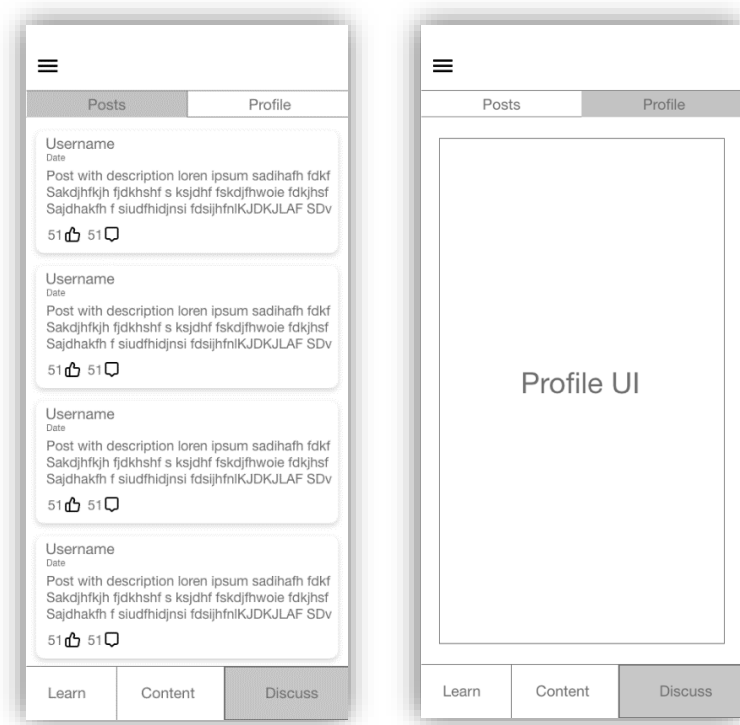
In the development of the RISE UP platform, UI wireframing was pivotal for optimizing the user interface. Serving as a foundational blueprint, wireframes enabled early visualization and focus on usability, allowing for an iterative design process. This approach facilitated efficient collaboration among designers, developers, and stakeholders, and was instrumental in user testing to gather direct feedback. The wireframes ensured a user-centric design, enabling the team to explore and refine the interface's layout and functionality effectively. This method proved to be a cost effective, efficient strategy for developing an intuitive and engaging user experience, aligning with RISE UP's goal of enhancing language learning engagement.



**Figure 1 Splash screen and Language selection**



**Figure 2 Separate sections for dictionary and translation app wireframe.**



**Figure 3 Forum and Profile section wireframe**

### 3.2.2 Game based language learning

#### 3.2.2.1. Overview of the game

"RISE UP Language Learning Game" is a novel digital platform designed to facilitate the learning and revitalization of endangered languages. The game stands out with its unique feature of being powered by community-generated content for the endangered languages, allowing for a rich and constantly evolving learning environment. Developed by Nurogames, it integrates a user-friendly web interface for content contribution, making the game not just an educational tool, but a living community project.

As players navigate through the game, they engage in a variety of language learning activities that mirror real-world interactions and cultural scenarios. These activities are designed to cater to different learning styles and proficiency levels, ensuring accessibility and inclusivity for all users. The game's structure is flexible, allowing for the integration of new content, challenges, and language exercises, which are dynamically updated based on user submissions.

This approach not only makes the game an effective tool for language learning but also turns it into a digital archive and a collaborative platform for cultural exchange. By allowing users to contribute content, "RISE UP Language Learning Game" leverages the collective knowledge and creativity of the language community, fostering a deeper connection between learners and the languages they are studying.

### 3.2.2.2. Storyline

In the "RISE UP Language Learning Game," the conventional narrative is replaced with an innovative, mission-based approach that immerses players in the linguistic and cultural landscapes of chosen endangered language. The game does not follow a linear storyline; instead, it offers a collection of diverse, interactive experiences that reflect the real-life use and cultural richness of each language.

Players embark on various missions, each designed to provide practical language usage scenarios. These missions range from simple daily conversations to complex interactions involving cultural nuances and traditions such as basic Excepts for introduction. As the game content is largely user-generated, the missions are continually updated and expanded, reflecting the evolving nature of language and culture. This dynamic approach allows players to experience a variety of cultural contexts and linguistic challenges, making the learning process engaging and realistic.

The lack of a fixed storyline in "RISE UP Language Learning Game" offers flexibility and adaptability, catering to a wide audience with varying interests and language proficiency levels. It encourages exploration and discovery, as players navigate through different missions, each unlocking new aspects of language and culture. This format not only aids in language learning but also fosters an appreciation for the cultural diversity and heritage of the languages being revived.

### 3.2.2.3. Mini games in RISE UP game

In the "RISE UP Language Learning Game," mini games play a crucial role in reinforcing language skills and concepts in an engaging and interactive manner. These mini games are strategically integrated throughout the game to provide varied, fun, and effective learning experiences. They serve as a vital tool in reinforcing language learning through practice and repetition, presented in a format that is enjoyable and less formal.

#### 3.2.2.3.1. Types of Mini-Games and Their Integration

- **Vocabulary Building Mini-Games:** These are designed to enhance the player's vocabulary in the target language. Examples include word matching games, image-based vocabulary quizzes, and crossword puzzles. These mini games appear at strategic points in the player's journey, corresponding to the vocabulary themes of their current level or module.
- **Grammar Practice Mini-Games:** To solidify grammatical concepts, these mini-games offer exercises in sentence structure, conjugation, and language syntax. Through games like sentence reordering or fill-in-the-blanks, players can practice grammar in a context that encourages trial and error without the pressure of formal tests.
- **Cultural Knowledge Games:** These games are designed to impart cultural knowledge and idiomatic expressions unique to the language's native speakers. Through trivia, puzzles, and exploration tasks, players learn about cultural nuances, historical facts, and traditional practices.
- **Listening Comprehension Mini-Games:** Here, players engage in listening exercises where they might listen to conversations, songs, podcasts or stories and answer questions or complete tasks based on what they heard, enhancing their listening skills in the target language.



### 3.2.2.3.2. Role in the Learning Path

Mini games in "RISE UP" are not standalone components but are interwoven into the broader learning path. They appear at intervals that align with the player's progression, serving as both a method of reinforcing recently learned material and a break from the more structured lessons. Their placement is strategically timed to reinforce learning objectives and provide a varied pacing in the game.

### 3.2.2.3.3. Adaptability and Personalization

The mini games adapt to the player's performance. For instance, if a player struggles with specific vocabulary, the game might offer more vocabulary-focused mini-games. This adaptability ensures that the mini games remain relevant and challenging for players at different proficiency levels.

### 3.2.2.3.4. Social and Competitive Aspects

Many mini games feature social or competitive elements, such as leaderboards or the ability to challenge friends, fostering a sense of community and friendly competition among learners. This aspect not only makes learning more engaging but also motivates players to revisit and practice language skills regularly.

### 3.2.2.4. Rewards and achievements

The "RISE UP Language Learning Game" incorporates a comprehensive system of rewards and achievements to motivate learners and acknowledge their progress. This system is designed to provide immediate gratification and a sense of accomplishment, encouraging continued engagement and language mastery.

#### 3.2.2.4.1. Types of Rewards and Achievements

- **Points System:** Points are awarded for completing various activities within the game, such as finishing lessons, participating in mini-games, and successfully completing language challenges. These points contribute to a player's overall language proficiency score.
- **Badges for Milestones:** Players earn badges for achieving specific milestones in their language learning journey. Examples of badges include:
  - **Linguistic Novice Badge:** Awarded for completing the first set of basic lessons.
  - **Grammar Guru Badge:** Earned by mastering complex grammatical structures.
  - **Cultural Connoisseur Badge:** Given for completing cultural immersion simulations and understanding cultural nuances.
  - **Conversation Champion Badge:** Awarded for reaching fluency in conversational scenarios within the game.
  - **Vocabulary Virtuoso Badge:** Earned by players who successfully master a comprehensive set of vocabulary in their target language, demonstrating extensive knowledge and usage.
  - **Pronunciation Perfectionist Badge:** Given to players who excel in pronunciation challenges, showing remarkable ability to mimic native speech patterns and sounds.
  - **Cultural Ambassador Badge:** Awarded to players who actively participate in cultural exchange forums, sharing insights about their own culture and showing keen interest in others.

- **Linguistic Lifesaver Badge:** Earned by players who frequently help others in community learning forums, answering questions, and providing guidance.
- **Storyteller Supreme Badge:** Given to players who create and share engaging, language-rich stories or content that benefits the learning community.
- **Challenge Champion Badge:** Awarded to players who consistently complete daily and weekly language challenges, demonstrating dedication and consistency in their learning journey.
- **Language Innovator Badge:** For players who contribute creative ideas or feedback that led to game improvements, showing investment in the evolution of the learning platform.
- **Community Connector Badge:** Earned by players who actively engage in language exchange partnerships, facilitating mutual learning and language practice.
- **Historical Explorer Badge:** Awarded to players who complete modules related to the history and origins of the language, demonstrating a deep understanding of its roots and evolution.
- **Level Advancement:** As players accumulate points and complete certain requirements, they advance through different levels, each representing a higher stage of language proficiency. These levels are visually represented and can be shared with other players.
- **Special Achievement Trophies:** These are awarded for extraordinary accomplishments, such as maintaining a long streak of daily practice or contributing significantly to the community through user-generated content.
- **Community Leader board:** A leaderboard showcases the top performers in various categories like points earned, levels completed, and contributions made. It fosters a sense of friendly competition and community engagement.
- **Certificates of Proficiency:** Upon reaching significant milestones or levels, players receive digital certificates acknowledging their proficiency in specific language skills, which can be shared on social media or added to professional profiles.

#### 3.2.2.4.2. Custom and Seasonal Rewards

In addition to the standard rewards, the game also introduces custom and seasonal rewards tied to cultural events, holidays, and special challenges. These rewards add an element of excitement and keep the content fresh and engaging.

#### 3.2.2.5. Content

The content of the "RISE UP Language Learning Game" is meticulously designed to offer a comprehensive and immersive learning experience. It encompasses a wide range of linguistic and cultural elements, tailored to facilitate the effective acquisition and retention of language skills. The content is dynamic, continuously evolving through community contributions and expert curation.

##### 3.2.2.5.1. Types of Content

- **Language Lessons:** The core content includes structured language lessons covering grammar, vocabulary, pronunciation, and syntax. These lessons are designed to cater to different proficiency levels, from beginner to advanced, ensuring a gradual and systematic learning curve.

- **Cultural Modules:** To deepen the understanding of the language's cultural context, the game features modules that explore history, traditions, customs, and arts of the language-speaking communities. These modules are interactive, often including multimedia elements like images, videos, and audio clips.
- **Interactive Dialogues and Scenarios:** Realistic dialogues and scenarios are embedded in the game, simulating real-life situations where players can apply their language skills. These range from everyday conversations to complex interactions requiring a deeper understanding of cultural nuances.
- **Mini-Games and Challenges:** A variety of mini-games and challenges are integrated into the content, focusing on different language aspects like vocabulary, grammar, and comprehension. These are designed to reinforce learning in a fun and engaging way.
- **User-Generated Content:** The game encourages and facilitates contributions from its user community. Players can create and share their own language exercises, stories, and cultural insights, enriching the content pool and fostering peer-to-peer learning.
- **Feedback and Assessment Tools:** The game includes tools for self-assessment and feedback, enabling players to track their progress, identify areas for improvement, and receive personalized learning recommendations.
- **Multimedia and Multisensory Elements:** To cater to diverse learning styles, the content incorporates various multimedia and multisensory elements, such as audio recordings, video clips, and interactive graphics, enhancing engagement and aiding memory retention.

#### 3.2.2.5.2. Adaptability and Customization

The game's content is designed to be adaptable to the specific needs and interests of individual learners. It allows for personalization, where players can choose focus areas or specific cultural aspects they wish to explore more deeply.

#### 3.2.2.5.3. Community and Social Learning

In addition to individual learning, the game promotes social learning through its content. This includes collaborative tasks, community challenges, and language exchange opportunities, all designed to build a supportive and interactive learning community.

### 3.2.3 Digital tools for language uptake

#### 3.2.3.1. Dictionary

The dictionary for various languages will be added either as pdfs or as look up in a dictionary database for the language. The content will be added by the communities to ensure accuracy.

#### 3.2.3.2. Translator

The generalised translator app will be available for languages where enough data is available. The translator app will help in sentence translations and will use the dictionary database.

#### 3.2.3.3. Other language specific tools and media

Other language specific tools such as Language risk taking app, Language map etc. will be added in the application, more information can be found in Deliverable 4.1 which includes various collections of

tools, resources in the already available in the language communities. Some of the major tools with open-source code or APIs will also be integrated into the RISE UP application.

### 3.2.4 Community forum for language and information exchange

#### 3.2.4.1. Posts and comments

The community forum within the RISE UP app features a robust and user-friendly platform for posts and comments, designed to foster a rich environment of language exchange and cultural sharing. This space is pivotal for learners to engage actively in language practice and information exchange.

##### 3.2.4.1.1. Structure and Functionality

- **Creating Posts:** Users can create posts on a variety of topics, ranging from language queries and learning tips to sharing cultural insights and experiences. The platform supports text-based posts, which can include questions, language exercises, or discussion topics. Users are encouraged to write posts in the target language to practice their skills. Users can like posts and filter their feed based on the post likes and comments.
- **Comment System:** Each post opens a thread for comments, allowing other users to engage with the content. Comments can include answers to questions, further elaborations on the topic, personal experiences, or additional queries. This threaded structure facilitates organized discussions and easy tracking of conversations.
- **Language Practice Focus:** To enhance language learning, the forum encourages users to write posts and comments in the target language. This real-world practice is instrumental in improving writing skills and gaining confidence in using the language.
- **Support for Beginners:** For beginners, the forum provides features like suggested phrases or auto-translation options to help formulate their posts or understand others' contributions. This ensures inclusivity, allowing learners at all levels to participate.

##### 3.2.4.1.2. Engagement and Interaction

- **Upvotes and Downvotes:** Users can upvote or downvote posts and comments, which helps in surfacing the most useful or relevant content. This community-driven curation ensures that valuable contributions are recognized and more visible.
- **Follow Threads or Users:** Learners have the option to follow specific threads or other users, enabling them to stay updated on discussions or contributions from users whose input they find helpful.
- **Notifications and Alerts:** Users receive notifications for responses to their posts or comments and alerts for new posts in threads they follow. This keeps them engaged and connected to ongoing discussions.

#### 3.2.4.2. Gamification

Gamification in the RISE UP app's community forum is strategically implemented to boost user engagement, enhance the learning experience, and foster a sense of community. By incorporating game-like elements, the forum motivates learners to participate actively, contributes to a positive learning environment, and encourages consistent language practice.

- **Points System:** The forum integrates a point system where users earn points for various activities like posting, commenting, answering questions, and participating in discussions. These points reflect the user's level of activity and engagement in the community.
- **Achievement Badges:** Users can earn various achievement badges as a recognition of their contributions and progress. Examples of community badges include:
  - **Community Helper Badge:** Awarded to users who frequently answer questions or provide helpful feedback.
  - **Discussion Starter Badge:** For users who initiate engaging and informative discussions.
  - **Language Mentor Badge:** Given to those who actively assist others in improving their language skills.
  - **Cultural Ambassador Badge:** Awarded for sharing insightful cultural information and experiences.
  - **Language Enthusiast Badge:** Awarded to users who consistently participate in language learning discussions and show a high level of enthusiasm in exploring and learning about the language. This badge is for those who consistently bring positivity and energy to the forum discussions.
  - **Cultural Storyteller Badge:** Given to users who frequently share interesting stories, anecdotes, or facts about the culture related to the language being learned. This badge recognizes the value of storytelling in cultural exchange and language learning.
  - **Helpful Mentor Badge:** Awarded to experienced users who go out of their way to mentor newcomers or less experienced learners. This badge acknowledges the role of mentorship in building a supportive learning community.
  - **Innovative Contributor Badge:** For users who contribute unique and creative ideas for learning exercises, games, or discussion topics. This badge encourages innovation and creative thinking in the community.
  - **Forum Diplomat Badge:** Given to users who are adept at mediating discussions, resolving misunderstandings, or providing balanced perspectives on contentious topics. This badge celebrates the role of diplomacy in maintaining a respectful and constructive forum environment.
- **Milestone Celebrations:** When users reach significant milestones in their language learning journey or forum participation, they are recognized within the community. This could be through special badges, highlighted posts, or featured profiles.

#### 3.2.4.3. Community Guidelines

The establishment of clear and respectful community guidelines is essential in the RISE UP app's community forum. These guidelines are designed to create a positive, inclusive, and supportive environment for language learners of all levels. They set the standard for interactions within the forum, ensuring that all members feel welcomed, respected, and motivated to participate.

##### 3.2.4.3.1. Key Elements of the Community Guidelines

- **Respect and Courtesy:** All members are expected to interact with each other respectfully. This includes using polite language, being considerate of different viewpoints, and avoiding any form of harassment or derogatory comments.

- **Relevance and Constructiveness:** Posts and comments should be relevant to language learning and cultural exchange. The forum encourages constructive discussions that contribute to the learning experience of all members.
- **Encouragement of Language Use:** While proficiency levels may vary, members are encouraged to use the target language in their posts and interactions as much as possible, to foster a practical learning environment.
- **No Spam or Self-Promotion:** The community forum is a learning space, not a platform for advertising or spamming. Any form of unsolicited advertisement or self-promotion is prohibited.
- **Sharing Accurate Information:** Members are encouraged to share knowledge and experiences but are also reminded to ensure the accuracy of the information they provide, especially regarding language rules and cultural facts.
- **Privacy and Confidentiality:** Personal privacy should be respected. Sharing personal information about oneself or others is discouraged, and any form of doxing is strictly prohibited.
- **Reporting and Moderation:** Members are encouraged to report any posts or behaviours that violate the community guidelines. A dedicated moderation team is responsible for addressing these reports and maintaining the forum's integrity.

#### 3.2.4.4. Moderation

Moderation plays a pivotal role in sustaining a constructive and respectful environment. The moderation is primarily facilitated by community volunteers, who are dedicated users committed to maintaining the forum's standards and nurturing a positive language learning space.

##### 3.2.4.4.1. Volunteer Moderation System

- **Selection of Volunteers:** Moderators are selected from active community members who have shown consistent engagement, adherence to community guidelines, and a constructive approach to interactions within the forum. Criteria for selection include language proficiency, communication skills, and a history of positive contributions.
- **Training and Guidelines:** Volunteer moderators undergo a training process to familiarize them with the forum's moderation tools, ethical guidelines, and conflict resolution strategies. They are equipped with the knowledge to handle various scenarios fairly and effectively.
  - **Roles and Responsibilities:** The primary responsibilities of volunteer moderators include:
    - Monitoring posts and comments to ensure adherence to community guidelines.
    - Addressing reports of inappropriate content or behaviour.
    - Facilitating discussions and helping maintain a positive atmosphere.
    - Assisting new members with forum navigation and usage.

##### 3.2.4.4.2. Community-Driven Moderation

- **Peer Reporting System:** Members of the forum are encouraged to report any posts or comments that violate the community guidelines. This peer reporting system acts as a first line of moderation, helping to identify issues quickly.

- Collaborative Moderation Approach: Moderators work collaboratively, discussing complex issues or borderline cases to ensure fair and consistent decision-making.
- Feedback and Improvement: Moderators regularly receive feedback from the community and the RISE UP app team to continually improve the moderation process. This includes adapting to new challenges and updating guidelines as needed.

#### 3.2.4.4.3. Transparency and Communication

- Open Communication: Moderators maintain transparent communication with the community, explaining moderation decisions when necessary and providing guidance on forum etiquette.
- Community Involvement: Regular surveys and discussions are held to involve the community in shaping the moderation policies, ensuring that the forum evolves according to the needs and expectations of its members.

#### 3.2.4.5. Multimedia support

Community forum is designed to be a multimedia-rich platform, supporting various types of content to enhance the language learning experience. This feature allows users to engage with and share a wide range of media, including PDF files, podcasts, videos, images, and links to external media. Such diverse media support caters to different learning styles and preferences, making the forum a dynamic and versatile tool for language and cultural exchange.

##### 3.2.4.5.1. Types of Multimedia Support

- PDF Files: Users can upload and share PDF files, such as language learning worksheets, e-books, cultural guides, or research papers. This feature is particularly useful for sharing in-depth written content and resources.
- Podcasts: The forum supports the integration of language learning podcasts or audio recordings. Users can share podcasts they find helpful or create and upload their own audio content, such as spoken language exercises or cultural narratives.
- Videos: Users can upload videos directly to the forum or share links to external video platforms. This could include language tutorials, cultural documentaries, vlogs, or user-created content that aids in visual and auditory learning.
- Images: The platform allows for the sharing of images, which can be used to visually convey ideas, share cultural insights, illustrate language concepts, or simply add a visual element to posts.
- Links to External Media: Users can share links to external resources, such as language learning websites, online articles, cultural blogs, or any other educational material that can be accessed online.

##### 3.2.4.5.2. Integration and Accessibility

- Seamless Integration: All media types are seamlessly integrated into the forum's interface, ensuring a smooth user experience. Users can easily upload, view, and interact with media content within the forum.
- Accessibility Features: The platform includes accessibility features, such as alt text for images and subtitles or transcripts for videos and podcasts, ensuring that the content is accessible to all users, including those with disabilities.

- **Quality and Safety Controls:** Uploaded content is subject to quality and safety checks to ensure it meets community standards and guidelines. This includes automatic scanning for viruses in PDFs and moderation of videos and images to prevent inappropriate content.



## 4 Conclusions

This deliverable represents a foundational step in the journey towards developing the RISE UP Digital Toolkit, a comprehensive platform aimed at revitalizing of endangered languages through innovative digital solutions. The concepts and strategies outlined in this document serve as a blueprint, laying the groundwork for the creation of a multifaceted tool that will encompass a language learning game, a community forum, and additional linguistic tools such as a dictionary and thesaurus. The integration of these components is not just about building a digital application; it's about crafting an engaging, culturally sensitive, and educational experience that resonates with the diverse needs of minoritized language communities which is the outcome of the interaction with the communities by the consortium partners.

In the coming months, the focus will shift towards the practical implementation of the ideas presented here. The development phase will see the transformation of theoretical concepts into tangible features within the RISE UP Digital Toolkit. This phase is critical, as it involves not only the technical aspects of app development but also the incorporation of feedback from the target communities, ensuring that the toolkit is user-friendly, culturally appropriate, and effectively meets the educational and social objectives of the project. The goal is to create a dynamic, interactive platform that not only aids in language learning but also fosters a sense of community and cultural connection among its users, contributing significantly to the revitalisation and celebration of linguistic diversity.

The deliverable D6.2 will further inform the result of the development that will take place for the Digital Toolkit and any changes in the plan outlined due to testing and feedback during the development phase.

## 5 References

- [1] Al-Dosakee, Karwan & Ozdamli, Fezile. (2021). Gamification in Teaching and Learning Languages: A Systematic Literature Review. *Revista Romaneasca pentru Educatie Multidimensionala*. 13. 559-577. [10.18662/rrem/13.2/436](https://doi.org/10.18662/rrem/13.2/436) .