Concept Plan Dutch Language Learning App for Refugees

Objective

The IMA Projects organization operates a refugee camp in the South of Limburg. It is home to over a hundred refugees from diverse backgrounds. Many residents remain in the camp for extended periods while awaiting legal documentation and permits. During this time, they often express a strong desire to learn Dutch. However, due to a shortage of volunteers, they currently receive only one hour of basic lessons per week which doesn't suffice.

To overcome this gap, we aim to develop a Dutch language learning app tailored specifically for refugees. The app will support multiple native languages and use a fully visual interface, making it accessible even to those who are illiterate. This way, refugees can learn Dutch independently, at their own pace and on their own terms.

Scope of Work

Deliverables in Scope:

Visual, language-based learning modules:

- o Sentence learning
- o Word learning
- o Pronunciation learning

- Fully visual interface for illiterate users

- Automated user registration (anonymous account number)

- Language selection feature

- AI integration for dynamic language support (Ollama AI)

- Educational games

- Mascot design to enhance engagement and experience

- Level-based learning progression

Out of Scope:

- Quests or story-based learning

- Real-time conversations or chat features

- User progress tracking

- Personalized name registration

- Streaming media

- Push notifications

- Reward systems

Tech Stack

<u>Backend:</u> Node.js

Handles user requests and integrates with AI models (Ollama AI)

<u>Database:</u> SQL

Stores user data, lesson content, and usage analytics

<u>Frontend:</u> HTML, CSS, JavaScript

Creates a responsive, intuitive, and visually engaging interface

<u>Version Control:</u> GitHub

Enables team collaboration and version tracking

<u>Deployment</u>**:** Hera

Deploys and maintains the application online

This technology stack ensures a reliable, scalable, and accessible learning experience tailored to the target audience.

Development Approach

Sprint 1: Focus on proof-of-concepts (POCs) and a minimum viable product (MVP)

Sprint 2: Finalize a functional prototype

Testing: Conduct user testing with the refugee target group and apply feedback for refinement

User Flow

The user flow diagram (attached) visualizes the steps a user follows within the app, starting from registration to selecting a learning path. Key flow elements include:

- Automated user account creation

- Language selection

- Choosing between games or language learning

- Navigating to specific learning paths: sentences, words, or pronunciation

- Level selection (1-5) to provide structured learning progression

The flow is entirely intuitive and relies heavily on visuals, making it accessible even for users that can't read.

Conclusion

This app will empower refugees by giving them the opportunity to learn Dutch in a flexible, engaging, and accessible way. It addresses a gap in language education and it uses technology to support the integration of the refugees.