LEARNING OUTCOME 4

Professional standards

Introduction

In this portfolio, I document both the redesign of my personal portfolio website and the design process of a language-learning app for refugees. I started by changing my portfolio from a playful Pokémon theme to a more professional style, so it could better represent me on platforms like LinkedIn. At the same time, I worked on an app that helps refugees learn Dutch in a simple and visual way. Both projects challenged me to think about design, usability, and how to match the right tone to the right audience.

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4.1 Self-assessment: Proficient

4.2 Design Challenge

4.2.1 Changing my first design

What:

I've made the choice of completely changing my design in the week before our 2nd assessment. Changing my inspiration from Pokemon to a more 'professional looking' design.

Why:

While changing and revamping my LinkedIn account (read more about this in 5.3.2), I came to the realization that you can add websites to the account. When I found this out, I saw a opportunity to use my current portfolio as a way to show my skills to future companies or recruiters. I also realized that basing my design on Pokemon might not be the best choice if I want to come across as a professional. I then got motivated to completely change my design.

How:

First I thought about how I wanted to make sure that my skills were visible in the design while also making it look professional. I spent an hour looking at different designs and compiled my favorites. I then showed them to different people and asked what they liked/disliked and which one they thought was the best fit for my personality. I then combined their answers with my initial thoughts and started to work on the design.

4.2.2 App Design choices

What:

The app design centers around a clean, structured interface for a language-learning experience. Screens like “Supermarket,” “Bathroom,” and “Restaurants” are about things that the user will come across in real life. Flows such as onboarding and theme selection are designed to be intuitive and consistent. The design combines playful learning with a professional visual tone, using calm colors, rounded components, and a mobile-friendly layout.

Why:

We moved from a minimalistic and childish to a more professional, colorful and a design for all ages. This meant we had to rethink the full visual style like fonts, layout, and the way screens are built. It wasn’t just about looks, but about changing the tone and identity of the app. Because of that, we had to go back to early design decisions, adjust the UI flows, and make sure everything matched the new goals. All of this had to be done in a short time.

How:

We started by researching existing apps and collecting design references. After deciding on a more professional direction, we stripped down the UI to emphasize clarity, focus, and user experience. Wireframes were redrawn, themes were rebuilt using Figma, and we tested different color and font combinations for readability and visual appeal. Feedback sessions helped guide our decision-making, especially when it came to balancing personality with professionalism. The final design uses consistent icons, modular spacing, and well-defined flows to support a cohesive and usable product.

4.3 Summary Process

- At the start of the project we came together to brainstorm about what our studio should be and what it should look like.

- After choosing an idea we began to brand our studio and began with designing some of the webpages.

- When we were done with that, we attended the presentation of the different customers that we could choose. When we made the decision, we wrote letters to our 1st and 2nd choices. Then we turned them in.

- After we got the word that our first choice also chose us, we did research and made an appointment to visit the location of our customer. We did this to get to know more about the company.

4.4 Advisory Report

This advisory report gives helpful advice on how to build an improve the web app that helps refugees to learn Dutch. The application uses AI to let people learn Dutch easier because they can use their own language. It also helps them with pronunciation and it will include sentence practice and fun games in a later stage. The report also looks into the things that are going well and what could be better. Lastly, it gives tips to make the app user-friendly.

Main objectives

The main objectives are listed below:

1. Support language learning for refugees in the context of their first language.
2. Focus on pronunciation to improve speaking and listening skill.
3. Expand the different options to learn with vocabulary, building sentences and games.
4. Provide advice on technology, UX and development practices that are future proof.

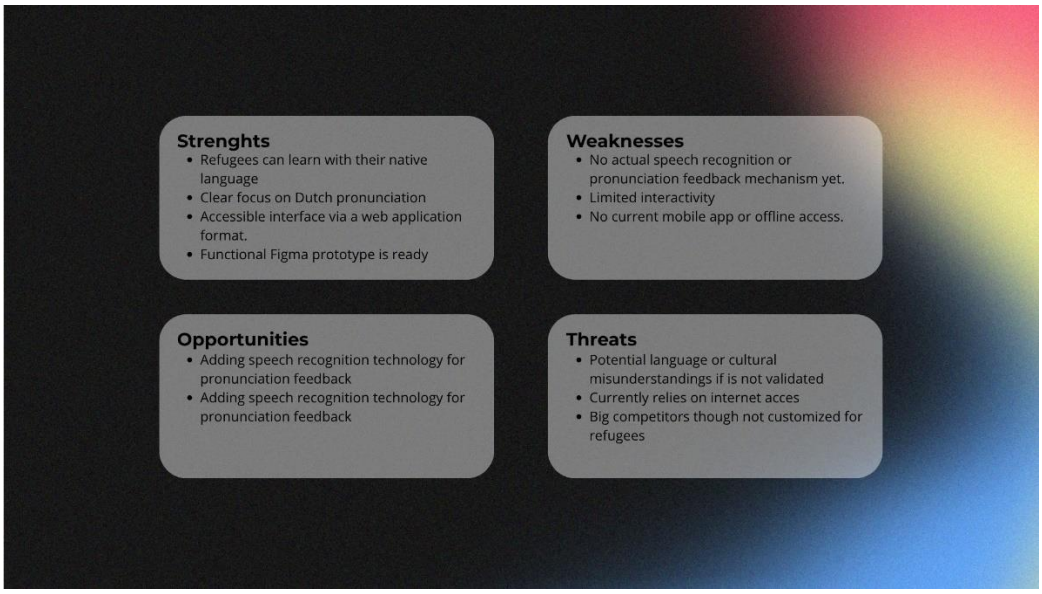
Methodology

The methods that were used are listed below:

- User-centered design: We used empathy maps and did interviews with refugees at IMA to optimize the design
- Figma prototype testing: We did user testing on our prototype in Figma to find out if we could make improvements.
- Team Brainstorming: We brainstormed a lot together to combine our ideas for the best results.
- Comparative analysis: We reviewed existing language learning apps and the way that refugees are learning Dutch.

Current situation

We have made a SWOT to know more about the current situation, I have worked it out visually and in text.



Strengths:

- They are able to learn from their native language
- There is a clear focus on Dutch pronunciation and this addresses a critical learning challenge.
- The app has a accessible interface via a web application format.
- There already is a functional Figma prototype for testing user testing and iteration.

Weaknesses:

- There is no actual speech recognition or pronunciation feedback mechanism implemented yet.
- There is limited interactivity, the current focus is mostly word-based. This lacks gamification or sentence practice.
- There is no current mobile app or offline access. This could be useful for users with limited connectivity .

Opportunities:

- Adding speech recognition technology for pronunciation feedback.
- Adding speech recognition technology for pronunciation feedback

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Threats:

- Potential language or cultural misunderstandings if content isn't validated.
- The application currently relies on internet access, this may limit use in refugee camps with less internet access.
- There are big competitors like Duolingo or Babbel. Although these platforms are less customized for the need that the refugees have.

Advice and recommendations:

All of the advice and recommendations that we've gathered are listed here with an explanation:

Technology Stack:

- Recommended Tech Stack for Your AI-Powered Language Learning App
- Frontend: Next.js (React + TailwindCSS)
- Backend: Fastify (Node.js) + OpenAI API (too expensive)
- Database: Local web browser database
- AI Models: GPT-4-turbo (for text-based AI: translations, grammar corrections, chat)
- Whisper (for speech-to-text: pronunciation analysis)
- ElevenLabs (for text-to-speech, optional)
- Llama A.I.

Performance:

For now, the app is slow because the current AI is way slower than Chat GPT which we can't add because of the budget.

User Experience:

- Provide visual + audio feedback.
- Include icons and illustrations to refugees who can't read.
- Enable customization by letting users choose their language of instruction.

Development Practices:

Use Git for version control.

Team and Resources:

Get feedback from actual refugees regularly.

Budget and Financing

Currently there is no budget.

Implementation Plan

Phase	Actions	Timeline	Resources
1	Integrate multilingual UI and vocabulary learning	Week 1–2	Frontend dev, translator
2	Add pronunciation training (text-to-speech first)	Week 3–4	Backend dev, UX designer
3	Add speech recognition (feedback loop)	Week 5–6	Speech tech, dev team
4	Design and implement sentence learning module	Week 7–8	UX + content team
5	Add gamification and reward system	Week 9–10	Game designer, dev
6	Prepare PWA / Offline version + mobile support	Week 11–12	Dev, testers

Risks and Mitigation Strategies

Risk	Mitigation
Lack of engagement	Add gamification early, gather user feedback
Language inaccuracies	Use community validation or local translators
Connectivity issues	Build offline access (PWA), reduce data usage

Conclusion

This report gives a clear overview of what's going well with and what still needs work. The idea of helping refugees learn Dutch in their own language is super valuable, and the focus on pronunciation makes it very useful. Right now, the prototype looks promising, but adding stuff like speech recognition, sentence practice, and gamification will make it way more useful and fun to use.

Figma prototype

https://www.figma.com/proto/eqIB7zF0VYFbLoV2QlQKQE/DCODE?node-id=2511-9587&p=f&viewport=249%2C135%2C0.05&t=YRpNyGo7P92c3r0N-0&scaling=min-zoom&content-scaling=fixed&starting-point-node-id=2511%3A10311&show-proto-sidebar=1

4.5 Ethical Considerations

For my Studio project we chose to help refugees with learning Dutch. This can help them with their boredom and this can help them with blending in with the Dutch community. I could have chosen other things like a boardgame or a rap-group.

4.6 Research Methods and Design approach

I used different research methods and models.

Research Methods Used

Interviews

I conducted structured interviews with both refugees and volunteers. The questions were targeted to understand personal experiences, learning challenges, teaching strategies, and cultural factors. This provided qualitative insights into language learning needs and barriers.

Empathy Mapping

After the interview I made an empathy map with the answers that we got from the refugees. I did this to make their wants and needs more clear.
I used an Empathy Map Canvas to put user insights in perspective. This helped to visualize what users see, hear, think, feel, and do giving a clear view of their experiences and pain points.

Point of View (POV) Statements

POV framing helped reframe user needs into problem statements. This was used to define more human-centered design challenges based on interview data.

Secondary Research

I explored existing tech stacks and AI tools for language learning. This supported solution development in the later stages.

Design Approach Used

Double Diamond Framework

My process followed the Double Diamond approach, structured into four key phases:

1. **Discover**
    - Conducted primary research via interviews and secondary research on tech.
    - Used empathy maps to explore user needs.
2. **Define**
    - Synthesized findings into key insights and POV statements.
    - Formulated clear design challenges based on user struggles and goals.
3. **Develop**

- Brainstormed and proposed solutions like a mobile app, QR code integrations, and pronunciation tools.
- Considered user-friendly features such as low-data use and picture-based content.

4. **Deliver**
    - Outlined specific solutions and features in your findings.
    - Provided implementation ideas including database, front-end/back-end frameworks, and AI tools.

4.7 Triangulation

For this project, I used triangulation to make the research stronger and more reliable. This means I combined different types of research methods, sources, and perspectives. The goal was to make sure the results weren't based on just one view, but that it was made up from more angles.

Methodological triangulation
I used multiple research methods to get different types of information:

- **Interviews** with refugees and volunteers to get personal and detailed input.
- **Empathy maps** to visualize emotions, thoughts, and behaviors from those interviews.
- **Figma user testing** to observe how people actually interact with the prototype.
- **Secondary research** to compare other language learning apps and technologies.

Data triangulation
I collected information from different groups and contexts:

- **Refugees** (the main users)
- **Volunteers and workers at IMA** (who help refugees)
- **Team feedback** from classmates and teachers during design reviews
- **Online sources** (like design trends, AI tools, and examples from other apps)

Theory triangulation
I applied different models and theories to better understand the problem and come up with good solutions:

- **Double Diamond design process** for structuring the project
- **Empathy Mapping** to focus on user needs
- **POV statements** to turn research into practical design challenges
- **Affinity mapping** to organize research themes and insights

By using these different approaches together, I was able to understand the problem from multiple sides. This helped me design a better app that fits both the user's needs and technical limitations. It also made sure the design choices were not based on assumptions, but on real data and feedback.

4.8 How Might We Questions

User Engagement

- **How might we** make language learning feel fun and rewarding without relying on childish visuals?
- **How might we** keep users motivated to return daily, even with a minimalistic interface?
- **How might we** design interactions that feel intuitive for both beginners and experienced learners?

Real-World Relevance

- **How might we** integrate everyday situations (like shopping or dining) to make vocabulary feel immediately useful?
- **How might we** design screens that clearly show context without relying on too much text?

Clarity & Usability

- **How might we** ensure users understand what to do on each screen at a glance?
- **How might we** minimize cognitive load while guiding users through multiple steps (like signing up, selecting topics, completing exercises)?

Tone & Professionalism

- **How might we** strike the right balance between a friendly tone and a professional visual style?
- **How might we** design a portfolio-quality interface that still feels nice and approachable to users?

Feedback & Progress

- **How might we** show progress in a way that motivates without overwhelming?
- **How might we** design micro-interactions and micro-feedback (like animations or checkmarks) to reinforce a sense of achievement?