COMP3000 Computing Project

2021/2022

Project Title

Language learning app using an AI implementation of the Leitner system.

Links

Source code: https://github.com/Zedster82/Comp-3000-Owen-Maynard

Project Vision

My application will be for users that want to learn a new language.
It will aim to solve the difficulties of learning a new language.
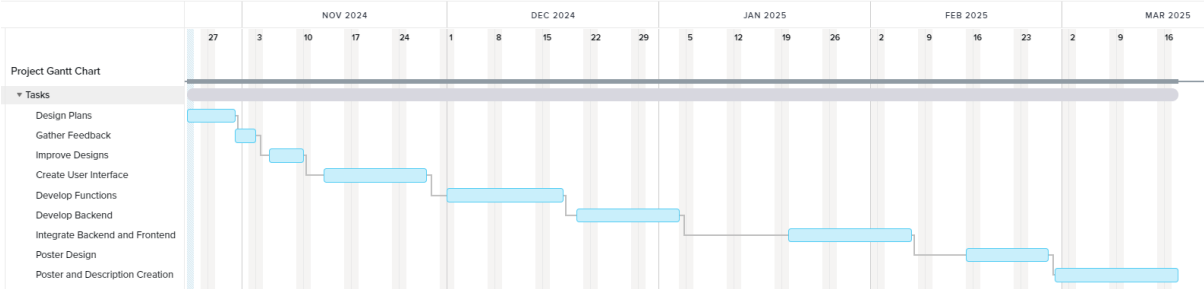The name of my project will be Leitner Language Learning.
It is an application that focuses on language learning via the use of the Leitner System with flash cards. This will help users be able to learn a language quicker as their learning will be focused and personal, therefore more efficient.
The languages that will be used will be JavaScript both for the front end and back end.

Risk Plan

Risk	Risk Reduction Techniques	Likelihood	Impact	Risk Exposure
Personnel shortfalls	Staff with top talent; job matching; teambuilding; training and career development; early scheduling of key personnel	7	7	49
Unrealistic time and cost estimates	Multiple estimation techniques; design to cost; incremental development; recording and analysis of past projects; standardization of	3	8	24
Developing the wrong software functions	Improved software evaluation; formal specification methods; user surveys; prototyping; early user manuals; software functions are going to be chosen by me therefore are not a large risk.	2	6	12
Late changes to requirements	Incremental development, define key requirements early, formal process for adding another requirement.	5	4	20
Performance problems	Conduct optimizing, debug parts of the program to identify slow areas.	4	8	32
Language data is inaccurate.	Gather data from reputable sources, keep sentences simple.	7	5	35

Proposed Gantt chart

Task	Start	End	Duration
Design Plans	24/10/2024	30/10/2024	6 Days
Gather Feedback	30/10/2024	02/11/2024	3 Days
Improve Designs	05/11/2024	09/11/2024	4 Days
Create User Interface	13/11/2024	27/11/2024	14 Days
Develop Functions	01/12/2024	17/12/2024	16 Days
Develop Backend	19/12/2024	03/01/2025	15 Days
Integrate Backend and Frontend	20/01/2025	06/02/2025	17 Days
Poster Design	15/02/2025	26/02/2025	11 Days
Poster and Description Creation	28/02/2025	17/03/2025	17 Days

Keywords

AI, Leitner System, Language, Learning, React Native, JavaScript