VocabApp

Meenal Shah

# Summary of Project

*For busy learners wanting to expand their vocabulary, this app offers a fun and engaging way to master the English language. It not only introduces new words and their synonyms but personalizes the learning experience through user-added words and context images, making it more meaningful and memorable. With interactive games and daily challenges, vocabulary building becomes effortless, enjoyable, and tailored to individual needs.*

# Project Analysis

## Value Proposition

*This app makes learning new words engaging, efficient, and personalized. By transforming vocabulary building into a fun experience, it helps users retain and apply new words in meaningful ways. Whether you're a busy professional, a student preparing for exams, or an English learner, the app adapts to your needs—helping you expand your vocabulary, express yourself with confidence, and even sharpen critical thinking skills, all while enjoying the process1.*

## Primary Purpose

*The main purpose of the app is to provide users with an easy and enjoyable way to enhance their vocabulary. By transforming the learning process into something fun and engaging, the app encourages consistent use, helping users stay motivated over time. This sustained engagement not only improves vocabulary but also promotes long-term retention, making it easier for users to truly internalize and apply the new words they learn.*

## Target Audience

* *Students studying for exams such as TOEFL, IELTS, GRE etc.*
* *Young adults, millennials and non-native English speakers trying to improve their vocabulary*

## Success Criteria

*Factors indicating success for the app –  
Quantitative:*

* *Number of downloads per month of the app*
* *Revenue generated from the app*
* *Average time spent in app*
* *Retention metrics (how much time the app stayed installed on the user’s phone)*

*Qualitative:*

* *Reviews on Play Store/App Store*

## Competitor Analysis

*Strengths of my app over competitors –*

1. *Allows user data – Most apps in the market do not allow users to add their own words onto the pre-existing list of words.*
2. *Free – Unlike most popular apps, my app is not planned to implement any subscription model or have a freemium experience of any kind, instead will work on a donation model, where users who can donate can donate to enable maintenance for the app.*

*Weaknesses of my approver competitors –*

1. *Does not have a pre-existing fan following – Some apps like Magoosh have a pre-existing name in the market due to their GRE/TOEFL prep courses. My app, being new, will not have the same user discoverability or user acceptance as those apps will have.*
2. *Curated courses over the years – Most popular vocabulary apps in the market have sustained their popularity for years, by constantly curating and improving on their vocabulary courses. My app will not have the same research data in the starting to improve vocabulary courses.*
3. *Tailor made courses – Right now, my app does not provide explicit tailor-made experience for the user on the basis of their level of English, that some apps like Promova offer.*
4. *Only offers English – Unlike some apps like Memrise, my app currently only offers vocabulary lessons in English.*

## Monetization Model

*The app will work on a donation model, where interested users will be asked to donate to help with the upkeep and maintenance of the app.*

# Initial Design

## UI/UX Design

*The app is structured into four menu options, settings and user profile –*

1. *User Profile – Will have the option to log out.*
2. *Learn new words – This is the homepage of the app. The user can select the course to learn words from (Figure 1)  
   As the user clicks on a course, the course opens to shows a set of words with their definitions and synonyms (Figure 2)*
3. *Add new word – The user can search a word and get the definition and synonym for the word. This word is automatically added to the words in “My Words”. (Figure 3)*
4. *Test – The user can select this to test their knowledge of the learned words in “My Words”. (Figure 4)*
5. *My list – The user can review words learnt previously. All words learnt from courses or added words will be shown here. (Figure 5)*

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| Figure Number | Image |
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| 2 |  |
| 3 |  |
| 4 |  |
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## Technical Architecture

* *A set data structure has to be defined to store the word, its synonyms, definition and context image.*
* *A database has to be used for storing all this information, as well as course information. New user defined data will also have to be synced with the cloud database.*
* *Also, the data will also have to be stored locally for users to be able to use the app offline as well as use the app in bad-network areas.*
* *Some 3rd party APIs will need to be called for accessing the cloud database and getting the definition from any dictionary.*

# Challenges and Open Questions

* *Sync timelines between cloud and locally stored data. What happens if the user uninstalls the app before the sync can happen?*
* *What happens when the 3rd party API shuts down its service to get the definition of the word?*