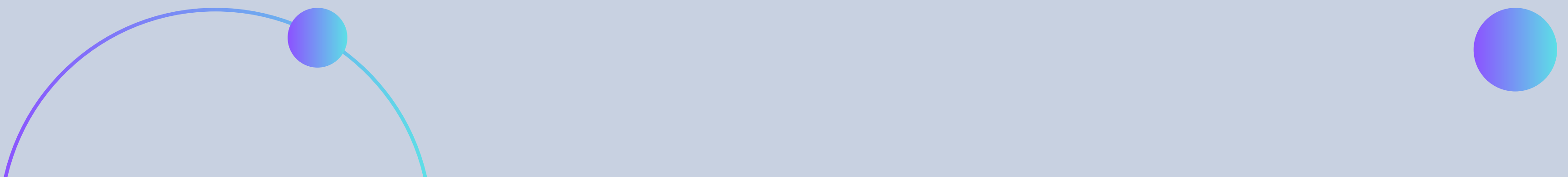Elevate Your Lifestyle with Our Mobile Technology

LEARNIT

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Project Description

The objective of this project is to create a language learning app called LearnIt in Flutter with modules for vocabulary, grammar, and pronunciation practice. The application Include flashcards, quizzes, and gamification elements to boost user engagement. Additionally, the app integrates with inventory management APIs for finding synonyms, antonyms, definition of the word provided by the user and uses state management for real-time updates.

Problem Statement

Language learning has become increasingly important in a globalized world. Traditional methods often lack engagement and flexibility, which can hinder progress. To address this, we aim to create an innovative language learning app called LearnIt, leveraging modern technologies and interactive methods to enhance the learning experience.

LearnIt (Education): Create a language learning app in Flutter with modules for vocabulary, grammar, and pronunciation practice. Integrate audio resources or third-party language learning APIs (if applicable).Include flashcards, quizzes, and gamification elements to boost user engagement. Employ Provider or Bloc for state management in handling user progress and scores.

If validation fails

Please Enter Your Details

Name

👤 Ritesh

Email Address

✉ riteshdhiman@gmail.com

Past Experience

Intermediate ▾

Submit

Please Enter Your Details

Name

👤 123

Enter a valid name

Email Address

✉ adsfsdfdf

Enter valid email address

Past Experience

Intermediate ▾

Submit

User Details Screen

The **User Details Screen** is aimed to get the user details which are name, email and past language experience. The name is stored in with the help of Provide to be used again in the proceeding pages.

Form Validation is also used to validate the entry made by by the user and only allow continuation to the next page after proper validation.

Features

 1. Vocabulary Page

 2. Saved Words

 3. Quizzes Page

 4. Grammar Page

 5. Quotes Page

Hello, Ritesh
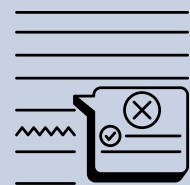
Vocabulary   Grammar

Quotes   Saved Words
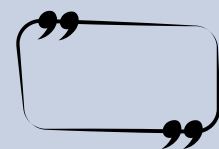
Quizzes
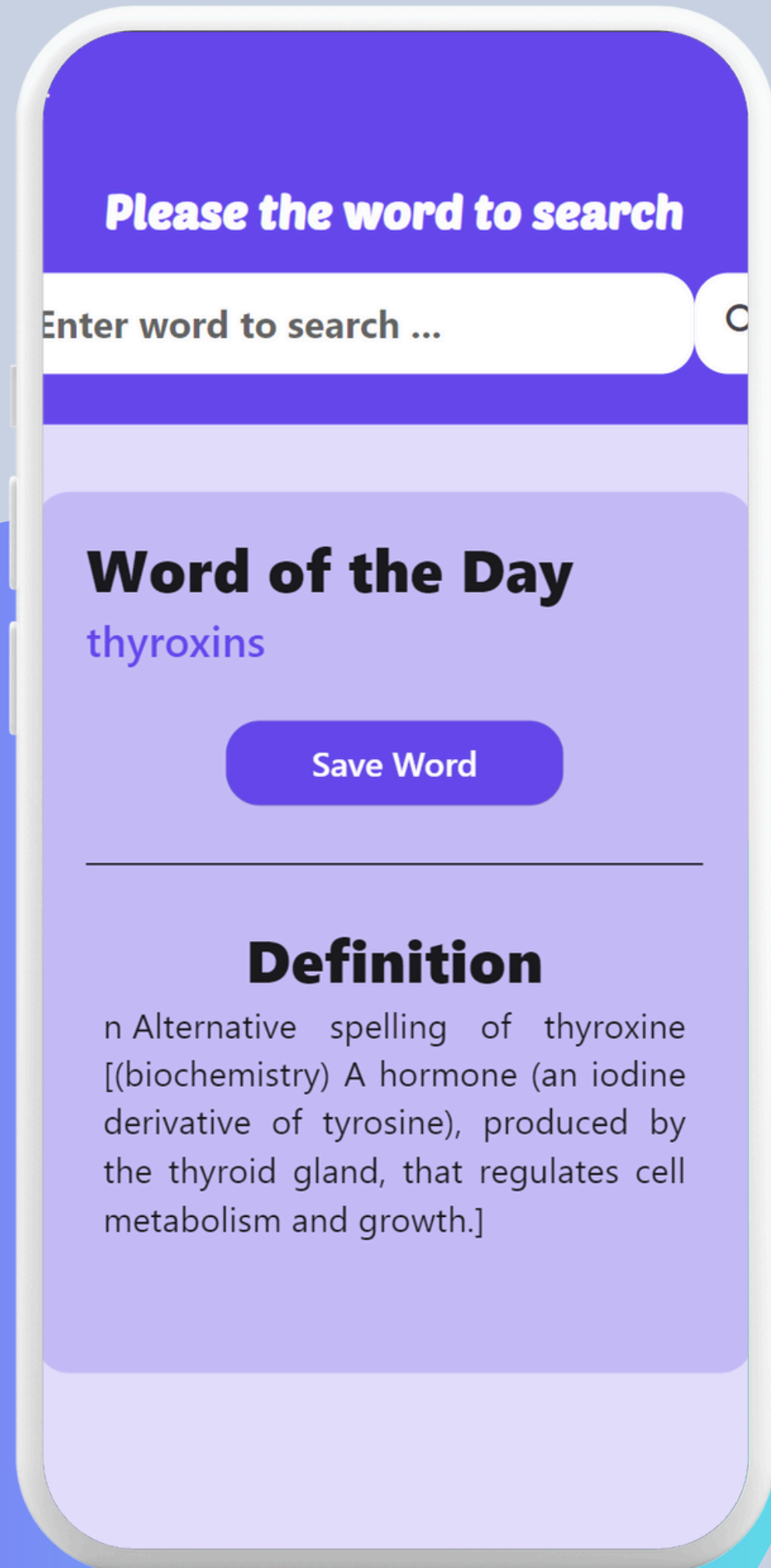
Vocabulary Screen

The VocabularyScreen displays Word of the day which is obtained as a response of Random Word API.

An option is also provided to save the word for future reference. Provider State Management is used for this where the word is added in a List variable which has global accessibility.

Search Functionality is also provided which gives 3 results :-
1. Word Definition
2. Synonyms
3. Antonyms

By default the definition, synonyms and antonyms are displayed for word of the day.

Grammar Screen

TThe Grammar Screen provides the rules of grammar that one should be aware and always follow as the course of learning the language.

Quotes Screen

The Quotes Screen displays a random quote every time along with the author of that quote.

Grammer Rules

1. Subject-verb agreement 🖊

In English sentences, subjects and verbs must be in sync. When they agree in number, sentences flow with a natural rhythm, establishing logical coherence. For example, this grammar rule is why we write "The dog chases its tail" (singular subject, singular verb) and not "The dog chase its tail" (singular subject, plural verb). And don't get confused with the "s" at the end of the verb –– adding the "s" doesn't make it plural.

2. Adjectives and adverbs 📖

Artists of language, adjectives and adverbs add vivid details to narratives. Adjectives describe qualities of objects, people, and places (nouns), while adverbs describe verbs, adjectives, and other adverbs. In the phrase "The quick brown fox," the adjective "brown" describes the fox. In the phrase "He runs swiftly," the adverb "swiftly" modifies the verb "runs."
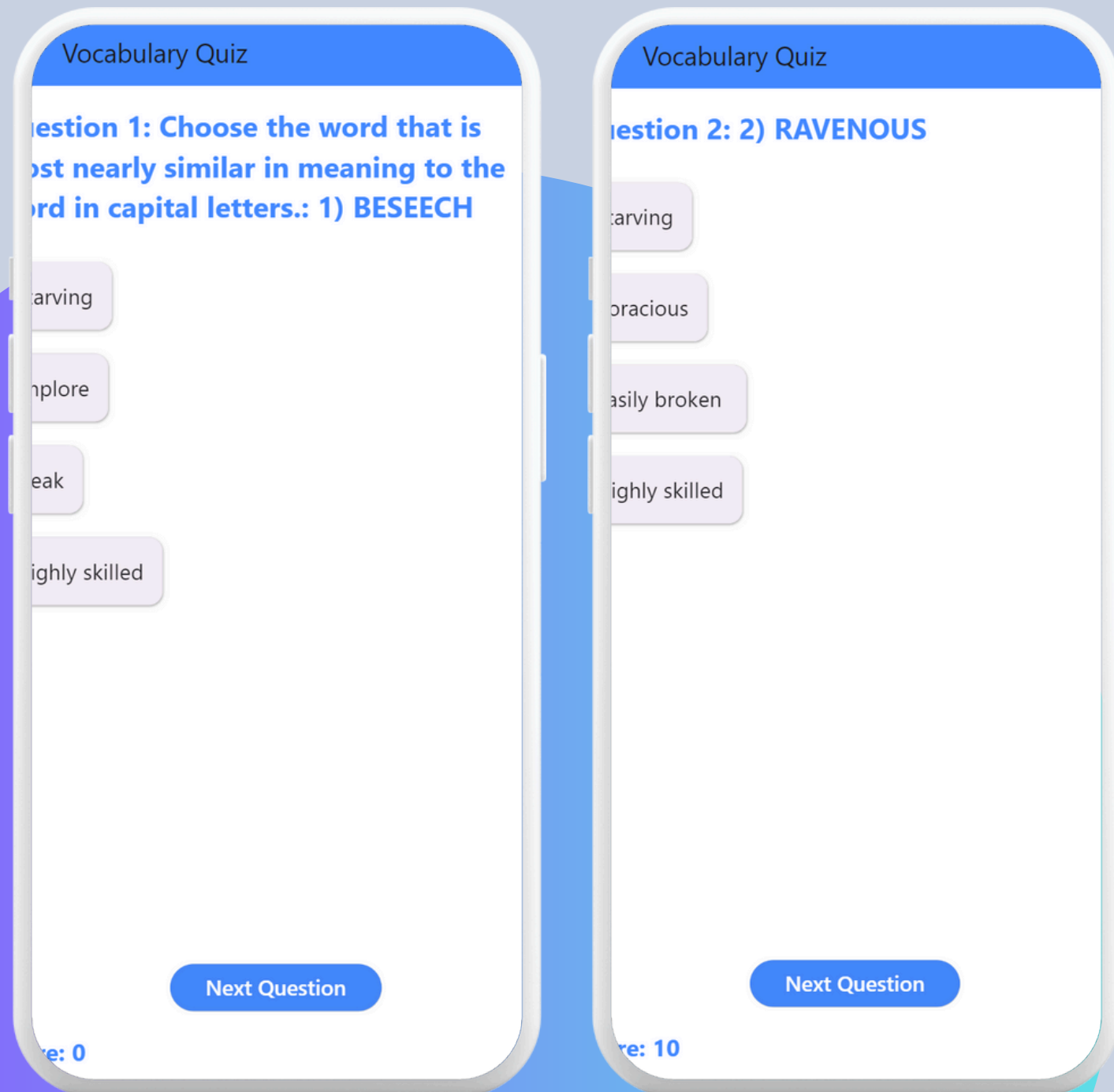
comma, signal when to pause and stop — much like traffic lights — and can steer readers off course when misused. For example, "Lets eat, Grandma" reads much differently than "Lets eat Grandma," and the only difference is a comma.

4. Sentence structure ☐

A well-structured sentence is like a well-constructed bridge — it carries the reader from one idea to another. Typical sentence structure is a subject, verb, and object, and following this is an excellent way to increase your writing fluency. For example, "John (subject) scrolls (verb) the smartphone (object)."

5. Verb conjugations and tenses

In the English language, verbs conjugate according to tense, such as the present perfect tense. Like placing markers on your narratives timeline, correctly adding verb tense avoids disorienting mistakes that disrupt writings flow and logic. For instance, using "She danced" (past tense) rather than "She dances" for a past event.

Random Quotes

Every Day, Nay Every Moment, Try To Do Some Good Deed.

- Abu Bakr

Vocabulary Quiz Screem

Vocabulary Quiz

Question 1: Choose the word that is most nearly similar in meaning to the word in capital letters.: 1) BESEECH

- carving
- mplore
- eak
- ighly skilled

Next Question

re: 0

Vocabulary Quiz

uestion 2: 2) RAVENOUS

- tarving
- pracious
- asily broken
- ighly skilled

Next Question

re: 10

The Quizzes Screen offers a quiz format to test users' vocabulary knowledge. Each question presents multiple-choice answers, with the design featuring:
• A title bar matching the app's color theme.
• Question and answer options displayed within cards for a clean, modern look.
• A button to move to the next question, updating the user's score accordingly.
• A dynamic scoring system to track user progress.

State Management
The app employs the Provider package for state management, ensuring efficient handling of user progress and scores. The VocabularyQuizProvider, SavedWordsProvieder and
GrammarProvider classes manage name of the user, email of the user, the list of questions, track user answers, saved words and update scores.

VocabularyQuizProvider-Manages vocabulary quiz questions, tracks the current question index, and updates scores based on user answers.

GrammarProvider- Handles grammar quiz questions, maintains the current question index, and calculates the score.

SavedWordsProvider- Used to keep a list of saved words as a List on the basis of user input.

External API Integration

Random word API is integrated to generate random words which are displayed as word of the day. This random word received as the response from the API is used to fetch more details by passing it to another API called Datamuse API.

The **Datamuse API** is integrated to fetch synonyms, antonyms, related words, and definitions for vocabulary learning. This integration allows the app to provide rich language data without
needing an API key, making it accessible and easy to use.

The **Dummyjson AP**I is integrated to fetch random quotes along with the author of the quote.

Future Versions of LearnIt:

Enhanced Pronunciation Practice:

- Integrate speech recognition for real-time feedback.

- Add more audio examples and exercises

Expanded Vocabulary Database:

- Include additional language resources and APIs.

- Provide more contextual examples and usage scenarios.

Adaptive Learning:

- Implement machine learning to personalize the learning experience.

- Dynamically adjust the difficulty level of quizzes.

Thank You