

# HealthLit: Ensure your Child's Health

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## What is the Problem?

The main problem that the HealthLit project aims to combat is a low level of health literacy in parents of young children. Parents often have problems properly absorbing the information given to them about how to properly care for their children, and this can lead to problems. For example, According to US Pharmacist, "Annually, more than 200,000 medication errors are reported to U.S. poison-control centers. Approximately 30% of these errors involve children." This demonstrates how severe of a problem low health literacy in parents of young children. Some specific problems include:

- ❖ Parents read info but quickly forget
- ❖ Parents discard info
- ❖ Info not widely available (rural/indigenous)
- ❖ Info hard to understand

These problems can all be fixed by a mobile application that presents health information to the user while using interactive components to reinforce their learning. This is the focus of the HealthLit project.

## Challenges

### Mobile Application

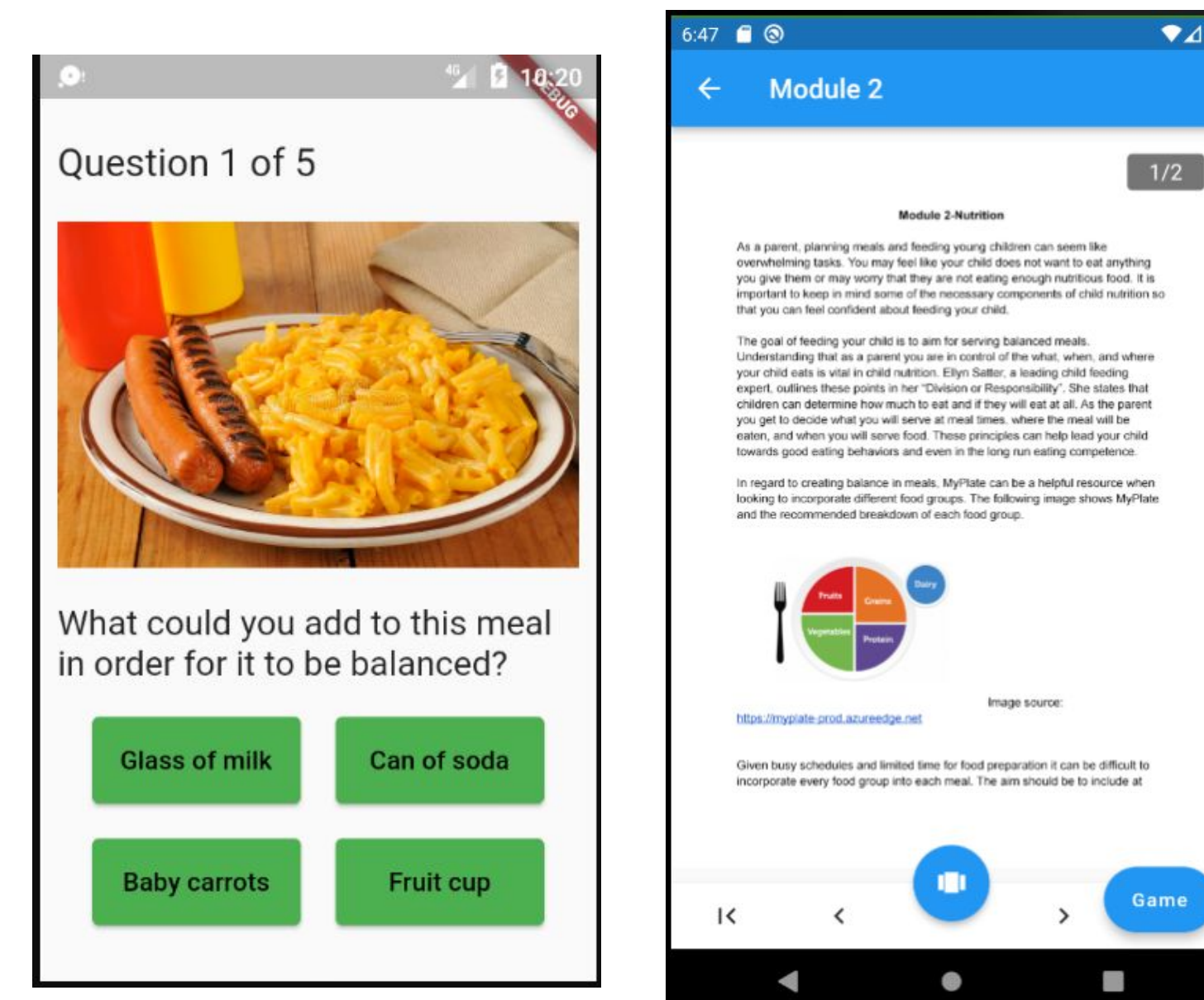
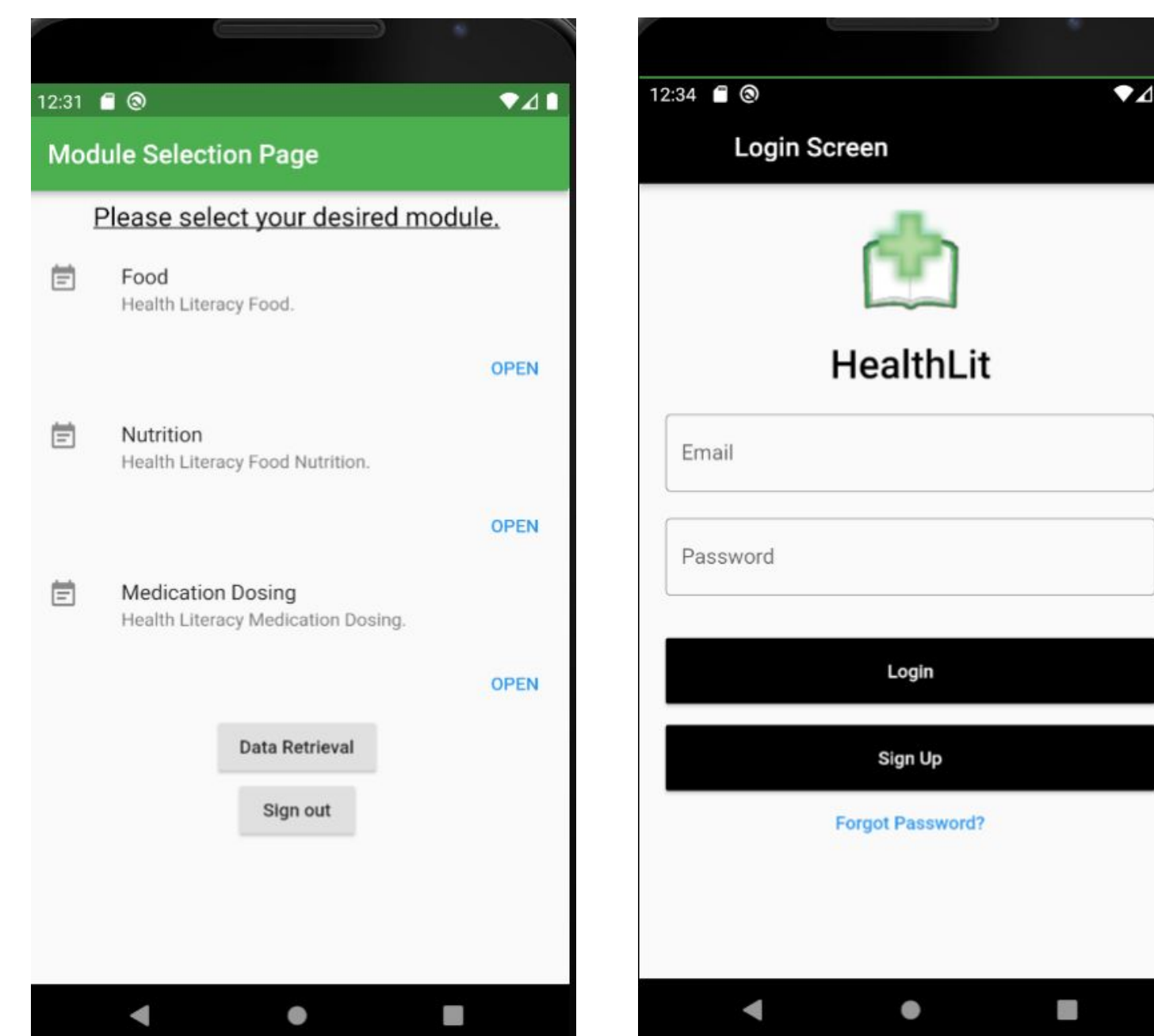
- ❖ Real-time Module loading
- ❖ Cross Platform Audio Plugin/Coding
- ❖ Screening of User Statistics
- ❖ Gamification of Modules

### Web Application

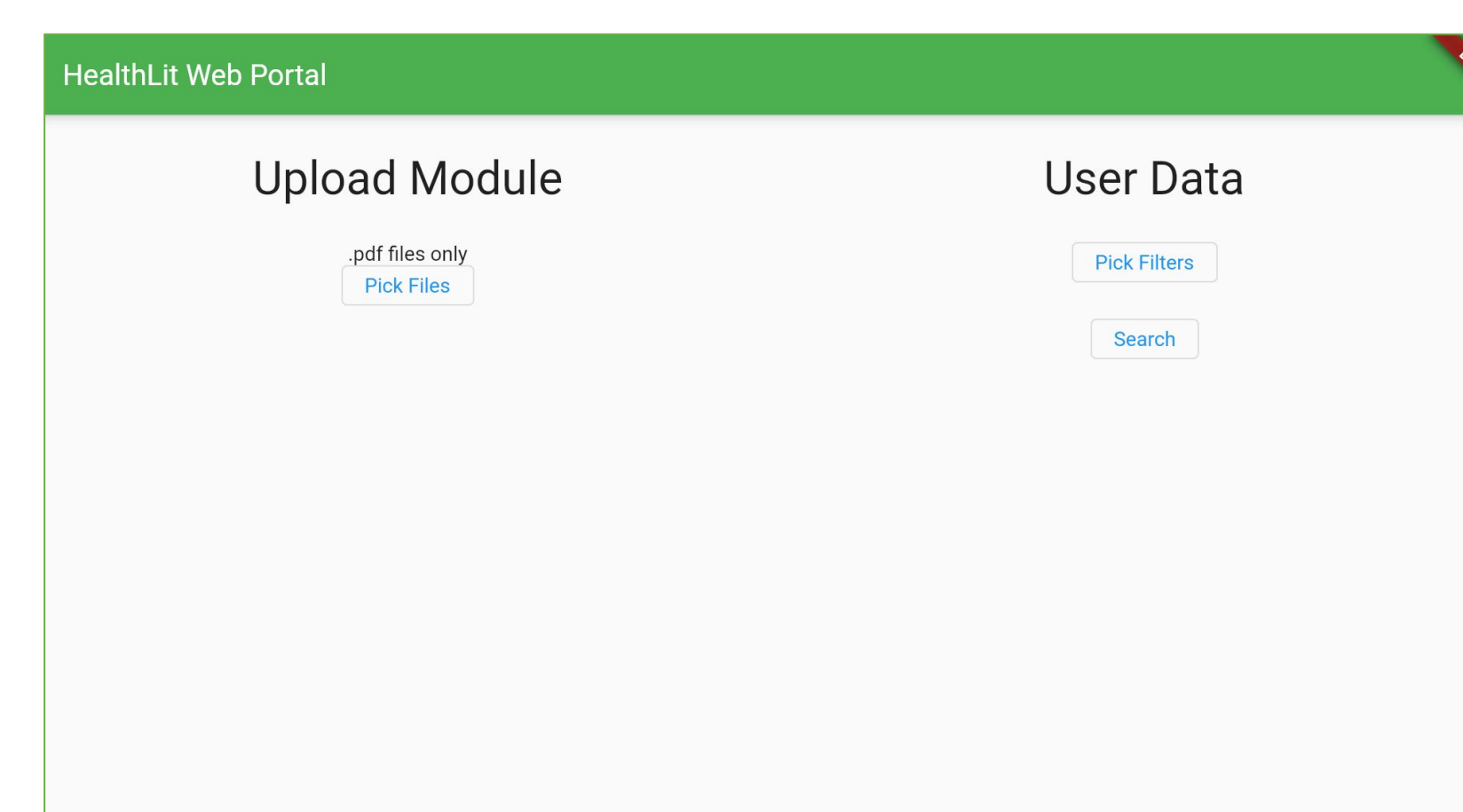
- ❖ Database Uploading of PDFs
- ❖ Filtering of Users

## How it works

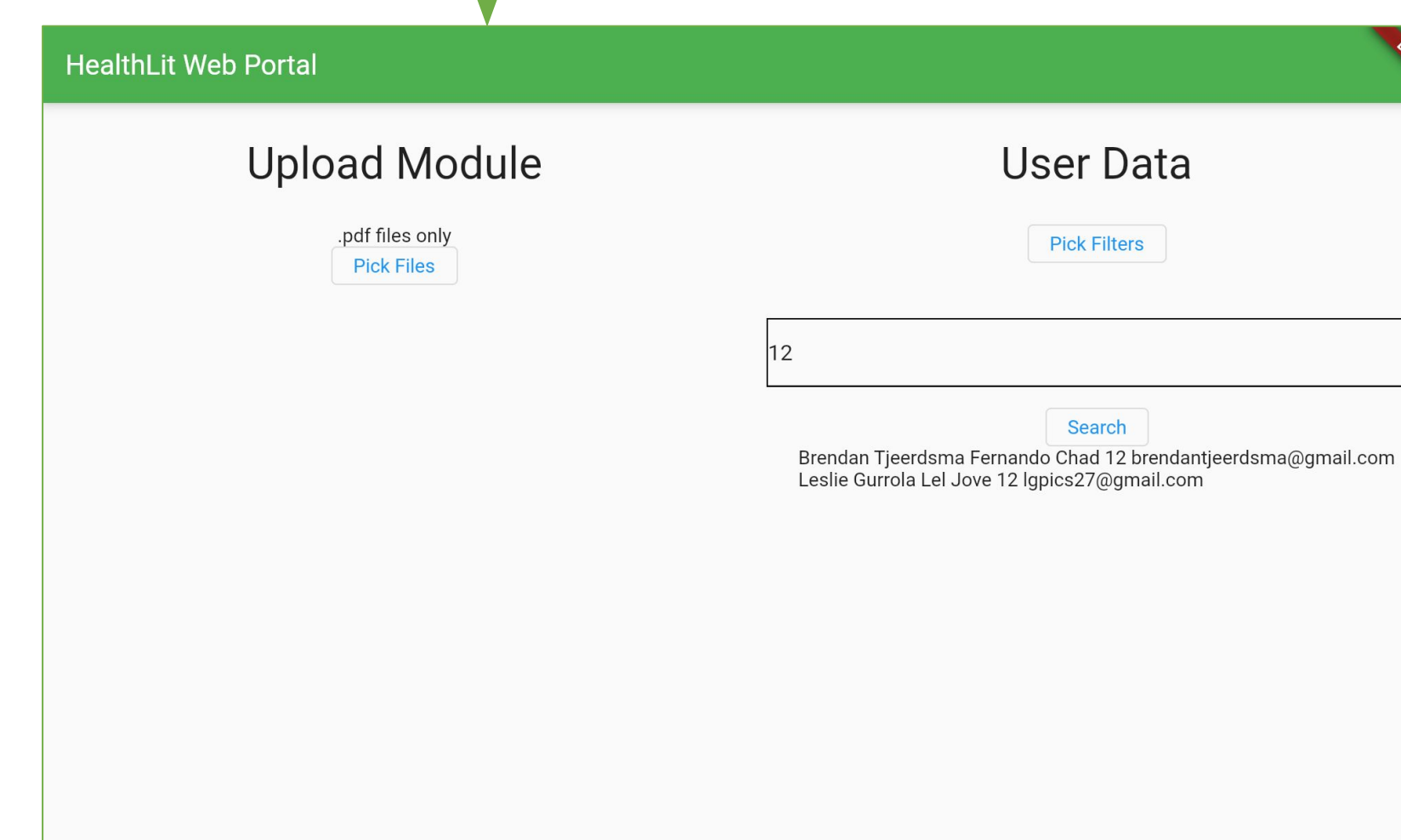
### Mobile Application



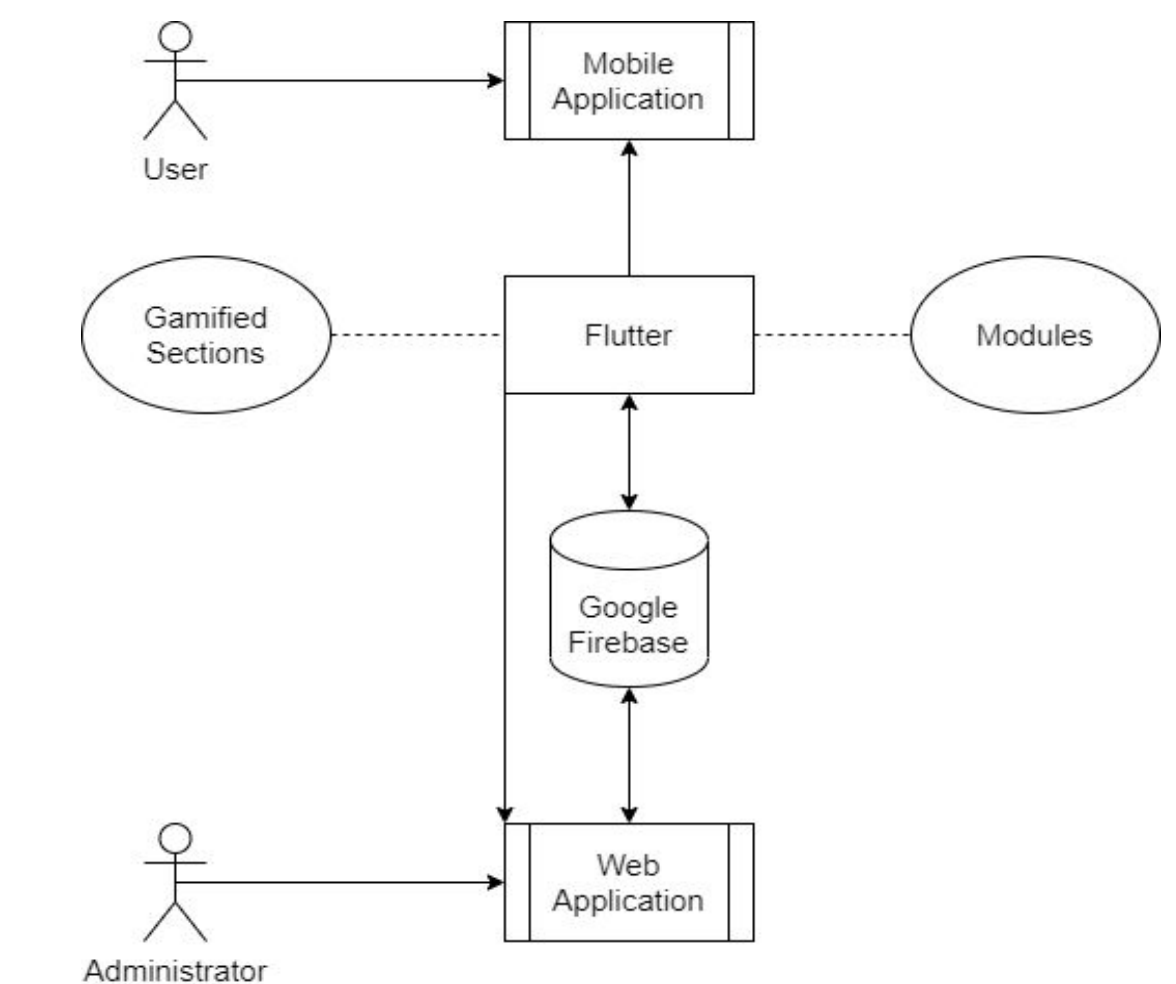
### Web Application



The Admin Selects Filters and Searches



## Architecture



- ❖ Mobile Application displays Module Information from Database
- ❖ Database collects User Information from Mobile Application
- ❖ Web Application adds Modules to the Database and view User Information from the Database

## Technologies

### Frontend:

- ❖ Flutter Mobile/Web
- ❖ Dart



### Backend:

- ❖ Google Firebase
  - ❖ Authentication Services
  - ❖ Firestore Database
  - ❖ File Storage



## Solution Overviews

Mobile Application was the main focus of our project. The mobile application allows parents to gather more information about their health literacy. It will also maximize the user's interaction and retention by including interactive games related to the module content.

The database is the midpoint between the mobile and web applications, and retains all of the user and module data. It receives and retrieves data from both applications in a seamless flow.

The web application is for administrator use and displays user information and includes the ability to upload new modules to the database.

## Future Work

### Mobile Application:

- ❖ Social Media Login
- ❖ Account User Editing
- ❖ Multi-language support

### Web Application Features

- ❖ Expand Statistical Analysis
- ❖ User and Module Management