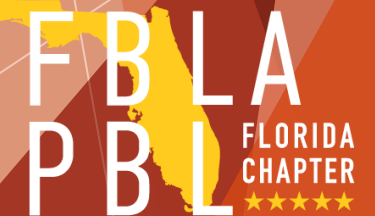


Quizza

An overview of the development and planning process



LEAVE YOUR MARK

FUTURE BUSINESS LEADERS OF AMERICA - PHI BETA LAMBDA

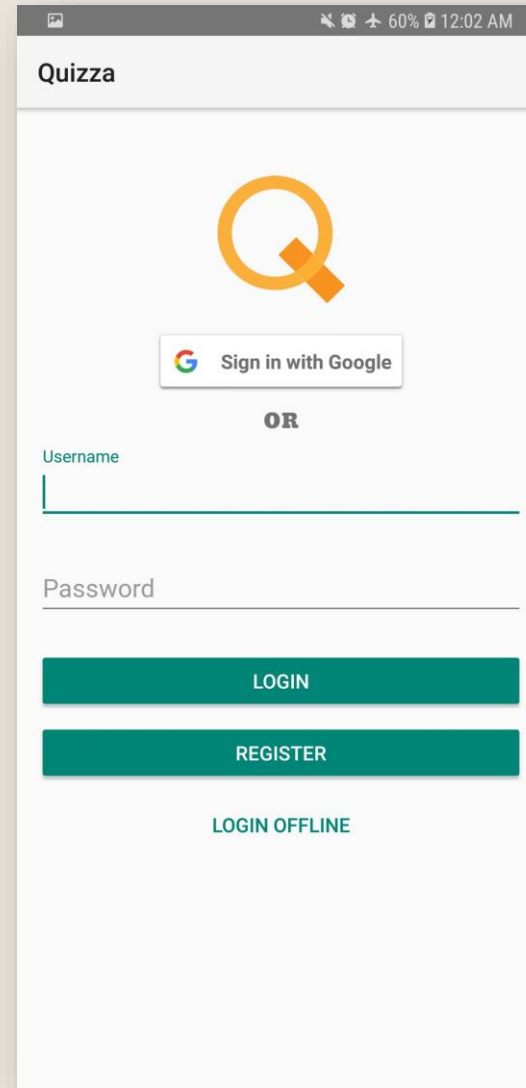
Objective and Features

- ▶ Modern and interactive approach to learning



Objective and Features

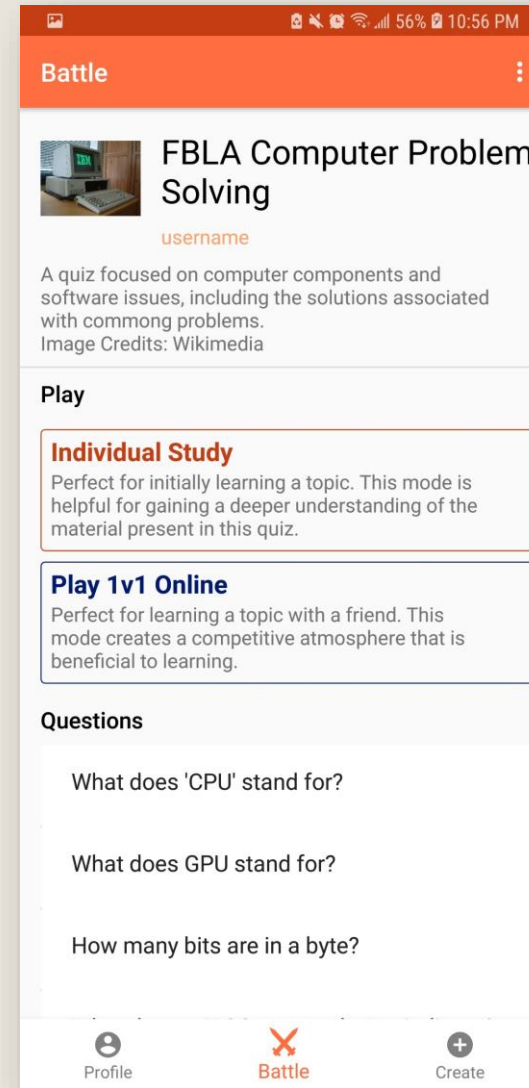
- ▶ Modern and interactive approach to learning
- ▶ Creatable user accounts



The image shows a mobile application interface for a platform named "Quizza". At the top, there is a status bar with icons for signal, Wi-Fi, airplane mode, 60% battery, and the time 12:02 AM. Below the status bar, the app title "Quizza" is displayed. The main content area features a large, stylized orange "Q" logo. Below the logo is a "Sign in with Google" button with the Google logo. Underneath this is the word "OR" in bold. There are two input fields: "Username" and "Password", each with a green underline. Below the input fields are two green buttons: "LOGIN" and "REGISTER". At the bottom, there is a link that says "LOGIN OFFLINE".

Objective and Features

- ▶ Modern and interactive approach to learning
- ▶ Creatable user accounts
- ▶ Online and offline quiz creation and battles



Objective and Features

- ▶ Modern and interactive approach to learning
- ▶ Creatable user accounts
- ▶ Online and offline quiz creation and battles
- ▶ In-app quiz editor

The screenshot shows a mobile app interface for creating a quiz. At the top, there's a status bar with icons for signal, Wi-Fi, and battery (56%), and the time 11:40 PM. Below that is an orange header with the text 'Create Quiz' and two buttons: 'SAVE' and 'PUBLISH'. The main content area has a title 'FBLA Computer Problem Solving' underlined. There are two questions listed:

1. Which of the following use flash storage in a standard M.2. port?
Contains 4 answers

2. How many devices can be daisy chained to a single USB port?
Contains 7 answers

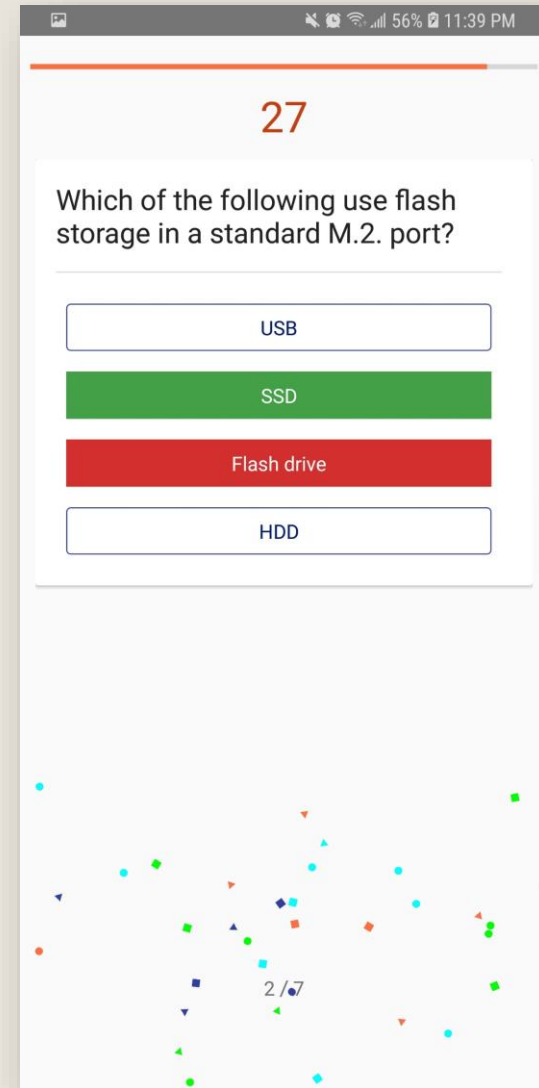
Below the second question, there is a list of five potential answers, each with a checkbox and a red 'X' mark to its right:

- ☒ 127
- ☐ 128
- ☐ 1
- ☐ 2
- ☐ 4

A green circular button with a white plus sign is located at the bottom right of the answer list.

Objective and Features

- ▶ Modern and interactive approach to learning
- ▶ Creatable user accounts
- ▶ Online and offline quiz creation and battles
- ▶ In-app quiz editor
- ▶ Instant feedback on answers
- ▶ Easy-to-use bug reporting system



App Usefulness

- ▶ Target Audience: FBLA members
- ▶ Benefits:
 - ▶ Modern and interactive method of learning
 - ▶ Multiplayer offers a competitive setting
 - ▶ In app creation of quizzes allows for the sharing of knowledge

App Usefulness

- ▶ Target Audience: FBLA members
- ▶ Effects:
 - ▶ FBLA members will get higher scores in events
 - ▶ FBLA members will gain an additional method of interaction with the organization
 - ▶ FBLA members will gain a deeper understanding of FBLA and its goals and vision

Code Design and Planning

- ▶ Strategies
 - ▶ **Offline** First Approach
 - ▶ Dependency Injection
 - ▶ Feature Based Approach
 - ▶ Model View ViewModel (**MVVM**)
 - ▶ Decoupled Classes
 - ▶ Object Oriented Approach

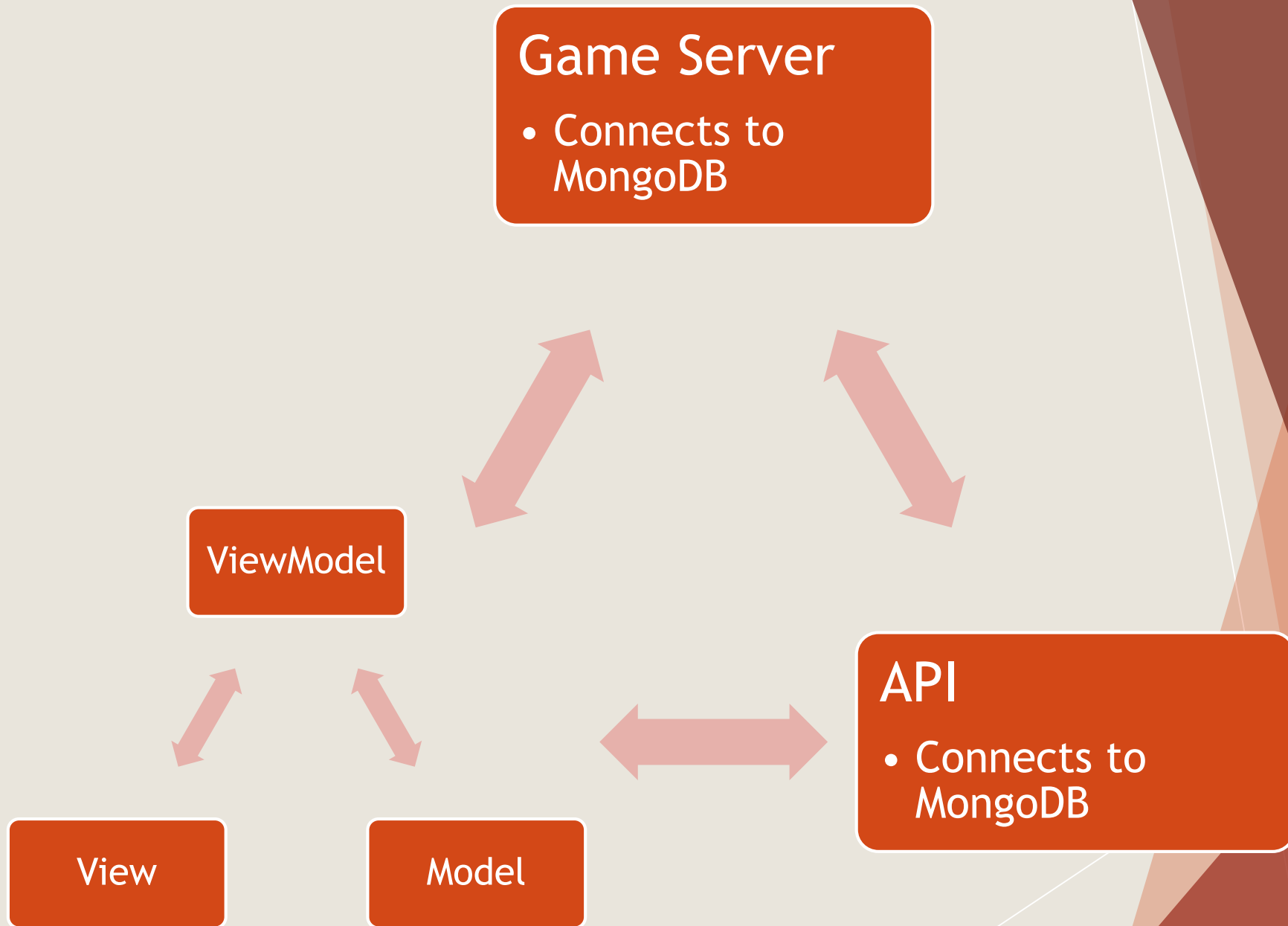
ViewModel



View

Model

Project Structure - App



Project Structure - Project

User Interface Planning

- ▶ Goals:
 - ▶ Modern
 - ▶ Intuitive
- ▶ Extensive user testing took place
- ▶ Planning included mock layouts and design sketches

Alternate Platforms - iOS/Swift



Pros

- ▶ Most users are on the latest version
- ▶ Device compatibility issues are limited

Cons

- ▶ Development requires a Mac development machine
- ▶ Closed nature of the app store

Alternate Platforms - Flutter/Android+iOS



Pros

- ▶ Cross-Platform (supports iOS and Android)
- ▶ Hot-reload capabilities, allowing for quick development cycles

Cons

- ▶ At the start of development of Quizza, Flutter was still in alpha

Alternate Platforms - Kotlin/Android



Pros

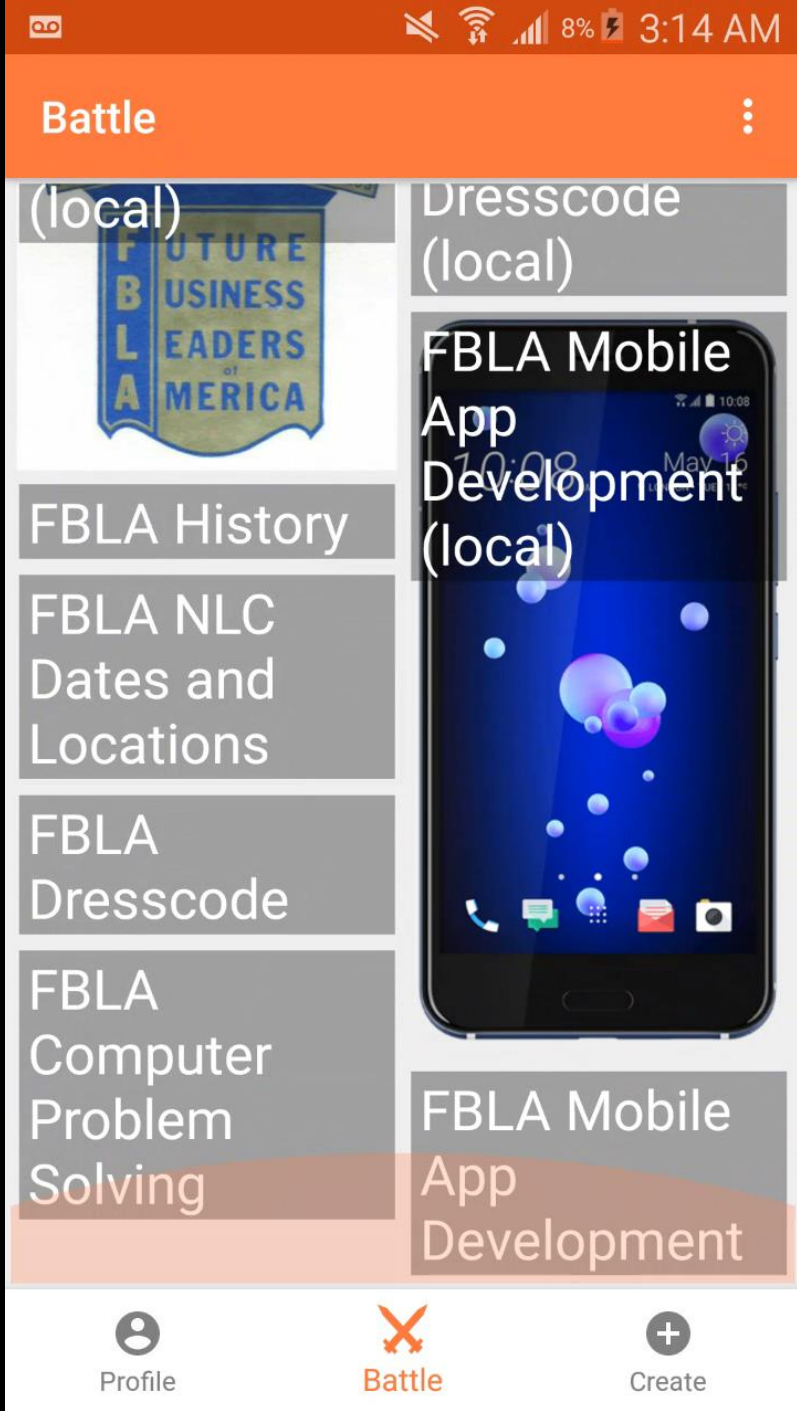
- ▶ Can be compile to support cross-platform use
- ▶ Language features enable quick development
- ▶ Large number of compatible resources

Cons

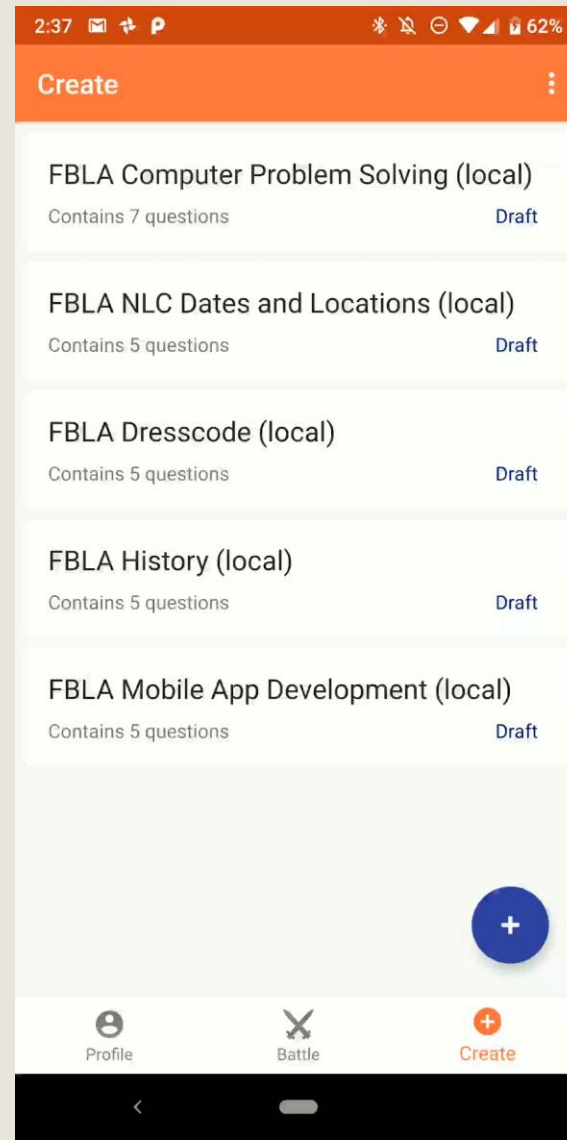
- ▶ Slower compilation times

Example Usage - Offline Play





Example Usage - Quiz Creation



Create



FBLA Computer Problem Solving (local)

Contains 7 questions

Draft

EDIT QUIZ

DELETE QUIZ

FBLA NLC Dates and Locations (local)

Contains 5 questions

Draft

FBLA Dresscode (local)

Contains 5 questions

Draft

FBLA History (local)

Contains 5 questions

Draft

FBLA Mobile App Development (local)

Contains 5 questions

Draft



Profile



Battle



Create