# Geek-Out

**Key Features**

- **Firebase**
  - Ranking and account information will be stored in firebase
  - We will be using firebase in order to store the questions and answers
- **The Project will feature both single-player and multi-player modes.**
  - Both modes will feature various genres to play.
  - Since Geek-out can have multiple answers for a question, we will be giving choices for each question.
- **For Multi-mode, we will implement the ranking system.**
  - End of each game, players will be given some amounts of exps for the rank up.
  - Exps will be based on the number of questions answered correctly and how rapidly has the player answered the question during a single match.
  - Exps will also be based on the placement of that match.
- **Answer Bank**
  - Since the number of questions will be limited, each question will have shuffled answer choices from the bank.
  - Answer bank will include all the answers that will be used for the app.
- **Possibly feature difficulty system (Normal, Hardcore)**
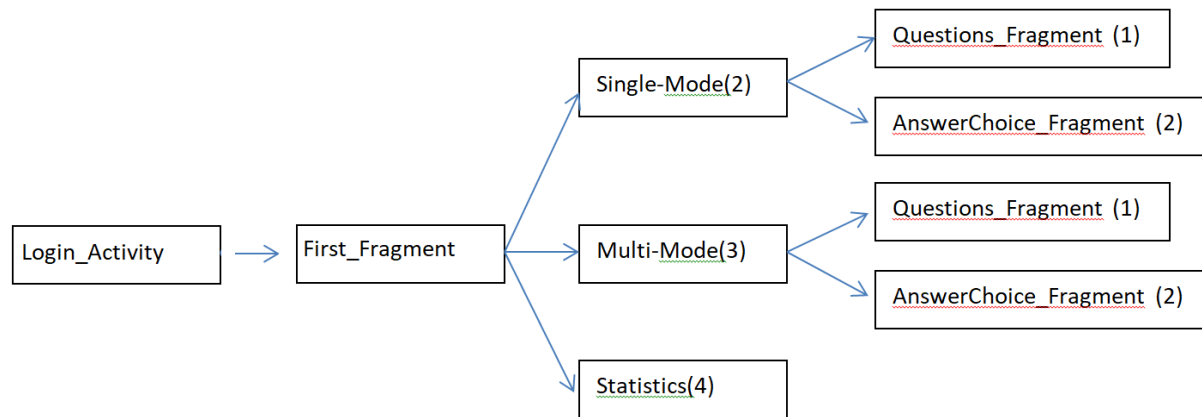  - For each genre, there could be maniac questions

**Architectural Components**

- We probably don't need many activities nor fragments
- We will need to implement networking for the multiplayer mode
- We might need to implement graphics/animation to transition from question to question
- We might need a database to store the questions and answers

**Work per person**
- Each person is responsible for coming up with questions and answers for 2, subject to change, genres.
- We'll work together to actually implement the code  game

**Navigation and Sample Draft**

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                                                     ┌─────────────────────────────┐
                                                  ┌─▶│ Questions_Fragment (1)      │
                                                  │  └─────────────────────────────┘
                                ┌──────────────┐  │
                             ┌─▶│ Single-Mode(2)│──┤
                             │  └──────────────┘  │  ┌─────────────────────────────┐
                             │                    └─▶│ AnswerChoice_Fragment (2)   │
                             │                       └─────────────────────────────┘
                             │
                             │                       ┌─────────────────────────────┐
┌──────────────┐    ┌───────────────┐            ┌─▶│ Questions_Fragment (1)      │
│ Login_Activity│──▶│ First_Fragment │──────┐     │  └─────────────────────────────┘
└──────────────┘    └───────────────┘  ┌──────────┐
                             │          │Multi-Mode(3)│──┤
                             │          └──────────┘  │  ┌─────────────────────────────┐
                             │                        └─▶│ AnswerChoice_Fragment (2)   │
                             │                           └─────────────────────────────┘
                             │
                             │       ┌──────────────┐
                             └──────▶│ Statistics(4) │
                                     └──────────────┘
```



Geek-Out

Email: _____

Password:_____

Register

Geek - Out

Rank   User Name

✸ Single-Mode

✸ Multi-Mode

✸ Statistics

## Single Mode

**Rank**

### Choose Category

Math
...

### Mode

Normal

Survival

Back

## Single Mode

Genre: ___Math___

Mode: Normal

Points: ___3850___

Timer

Sample: Question #1 / 10

What is 1 + 1 ?

▶ 3

▶ 4

▶ 5

▶ 2

## Multi-Player

**Rank: Master**

Points: 9999999999

### Choose Mode

⚡ **Standard**

⚡ **Survival**

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## Multi-Player

Mode: Normal

My Points: 3850
Player2:    3630
Player3:    1590
Player4:    1010

Timer

Genre: Math
Sample: Question #1 / 10
What is 1 + 1 ?

▶ 3

▶ 4

▶ 5

▶ 2

## Statistics

Single Play

Multi Play

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## Statistics

**Multi-Play**

Rank: **Master**

1$^{st}$ Place: **999** Times

2$^{nd}$ Place: **1**   Times

3$^{rd}$ Place: **3**   Times

4$^{th}$ Place: **0**   Times

Total Exps: **999999999999**

Exp for Next Rank: 0

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**Risks**

- Having multiplayer for the game and finding a way to connect multiple phones to the same server
- Creating enough questions so that it keeps the game interesting and questions are not repeated

**Solving the risks**

- For having multiplayer, we will have to have a server where all of the users can connect to during the game. Once all players are in, the question will appear at the same for each player
- with creating the questions, it will take some time but all members will be creating genres with around 20 questions

Discussed about implementing the firebase, how the game will run during the multiplayer-mode, and need some serious discussion about implementing multiplayer-mode(Using server? or networking?)

**Genres each person will come up with:**

Dong Yoon Jung - Video Games, Anime

 Mason Paradise - Umd trivia, sports

Anthony Squillacioti - Fashion, Music

Conor Syme- Geography, Star Wars

**Firebase Information:**

Firebase Account: cmsc430geekout@gmail.com

Firebase Password: !geekout123

firebase.google.com