

Dungeons & Dragons Game State Manager

User Manual

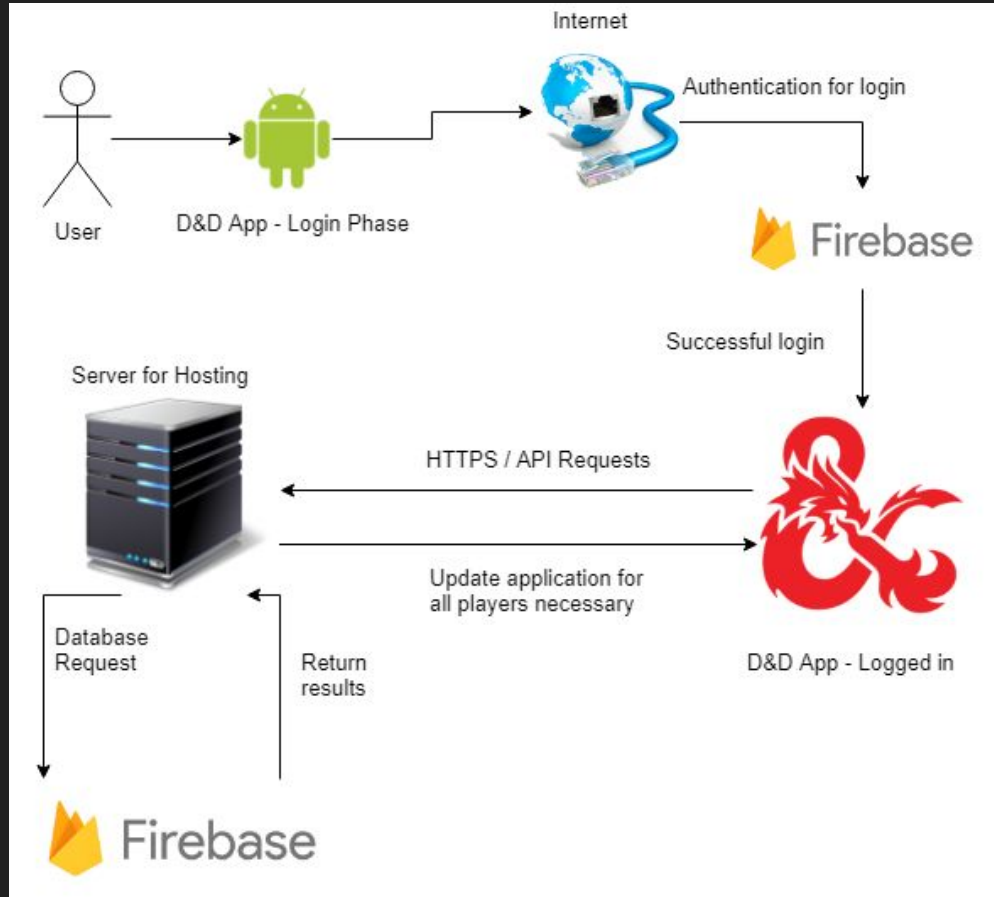
Developed for Retro Rabbit by Optimize Prime



Description

The application is intended to act as a helper and assistant when users are playing a game of Dungeons & Dragons. The application tracks information and events of the current game session being played, to provide players with an easier way to see the current state of the game, compared to keeping track manually on paper. It will provide users with an easier way to keep track of their current characters, as well as creating new characters or updating information on existing characters. Users will also have the ability to look at a monster journal, which shows all monsters that have been encountered so far, and allows users to add monsters that they encounter later. Users will be able to create accounts on the application where all of above mentioned information will be displayed. Users will be able to use the application either as a Dungeon Master or a normal Adventurer. A user playing as a Dungeon Master will be able to create a session, granting the session a name, password, and a limit on the amount of characters that can be in the session. A Dungeon Master will be able to set and trigger events such as setting a trap, and when an Adventurer walks over it, it triggers an event causing the Adventurer and/or their party to be notified of the event. A user playing as an Adventurer will be to join a session, if the user is nearby the session host (Dungeon Master).

System Configuration



The picture here is to give you a brief overview of how the system works from logging you in, to how it handles requests to the server and the database for updating the state of the game.

Installation (if you wish to see source code as well):

The steps for the current installation process are as follows:

1. Install flutter - <https://flutter.io/setup-windows/>
Follow the setup steps as listed on the website.
2. Install Android Studio - <https://developer.android.com/studio/index.html>
3. Install the flutter and dart plugins for Android Studio if not already installed.
4. Clone the source code from the GitHub repository -
<https://github.com/COS301-OptimizePrime/COS301-DnD/tree/develop>
5. Run the following command in terminal: `keytool -exportcert -list -v -alias androiddebugkey -keystore %USERPROFILE%.android\debug.keystore` where `%USERPROFILE%` is your user directory. e.g.: C:\Users\John\
6. Look for the SHA1 code, it will have a format of: XX:XX:XX....:XX
7. Go to the group Firebase Console - <https://firebase.google.com/> - and add your personal SHA1 key in Settings->SHA certificate fingerprints. Only authorized users (clients and developers) will have access to the Firebase profile while the application is under development.
8. After that, you should be able to compile the application via Flutter or Android Studio. To run via Flutter, type the following command: `flutter --run release` while your android device is plugged in

Note: APK installation guide is on the next page for an easier install for all users

Installation (if you wish to see only application itself):

The steps for the current installation process are as follows:

1. Go to the following link:
<https://drive.google.com/drive/folders/12HY6iUL4L1SwOfvVqIHtnCrvDLMY9uKf?usp=sharing>
2. Download the APK from the folder
3. Copy it to your android device
4. Enable installations from untrusted sources on your device
5. Navigate to the APK via the file manager and install it.

Getting Started:

Using the application is very straight forward. When you open the application, you will be presented with 2 input fields for an email and a password, as well as 3 buttons: one to login with the details you have provided, one to sign in with a Google account, and one to register an account. The Google sign in option will open a list of Google accounts that are stored on your phone, and you simply have to choose one and enter your credentials in the steps that follow. To register an account, simply input a valid email address, and a password that is 6 characters or longer. Once you are signed in, it will take you to the Monster Journal viewer. To sign out at any time, simply press the “Sign Out” button in the top right hand corner of the application. To exit the application, simply close the application on your android device.

See the next page for screenshots



spongebob@cos123.com

.....

Enter World!

Google Sign In!

Register



Choose account for
dnd_301_final



Add account

Register



spongebob@cos123.com

.....

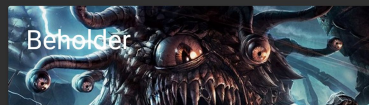
Confirm Password

Register New Account

Login

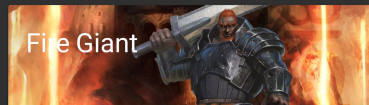
Monster ...

Sign Out!



Beholder

One glance at a beholder is enough to assess its foul and otherworldly nature. A beholder's spheroid body is covered in ...



Fire Giant

Master crafters and organized warriors, fire giants dwell among volcanoes, lava floes, and rocky mountains. They are ...

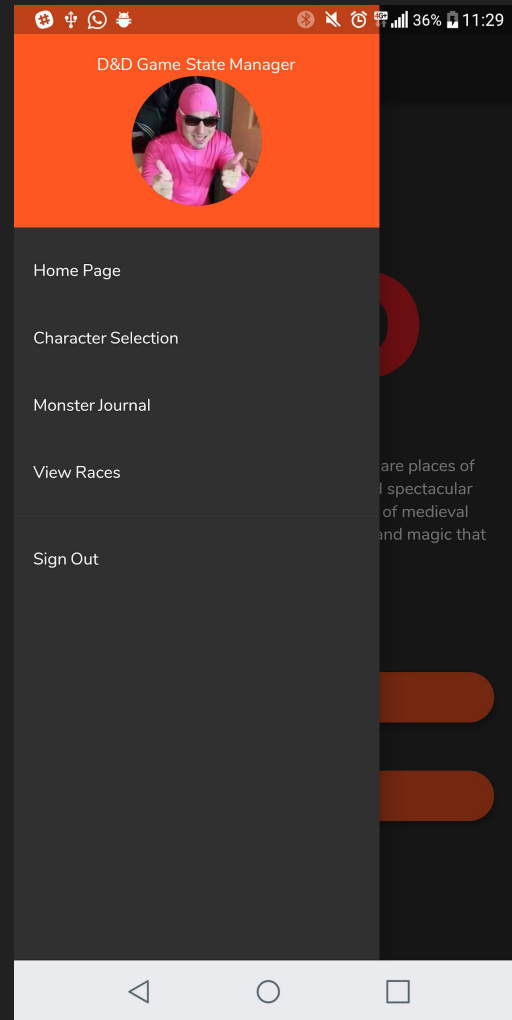
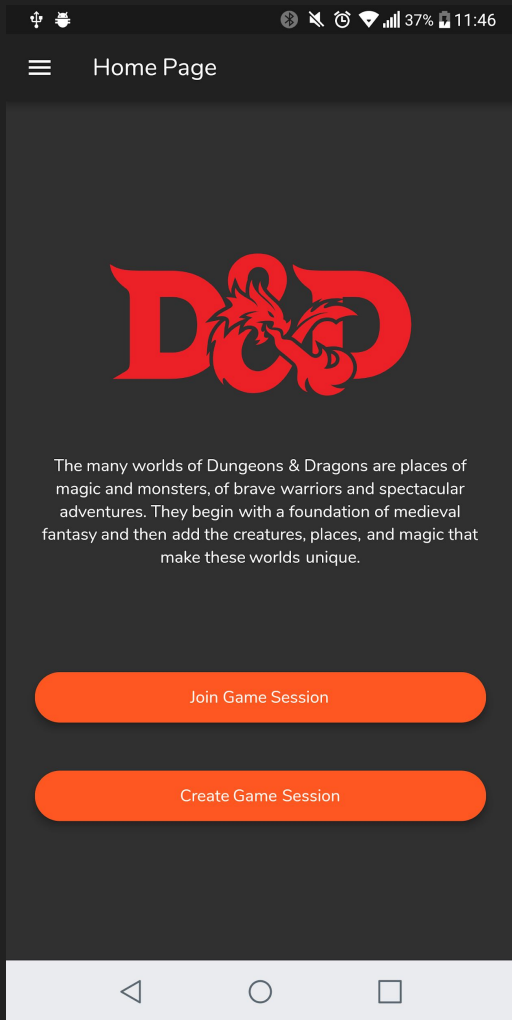


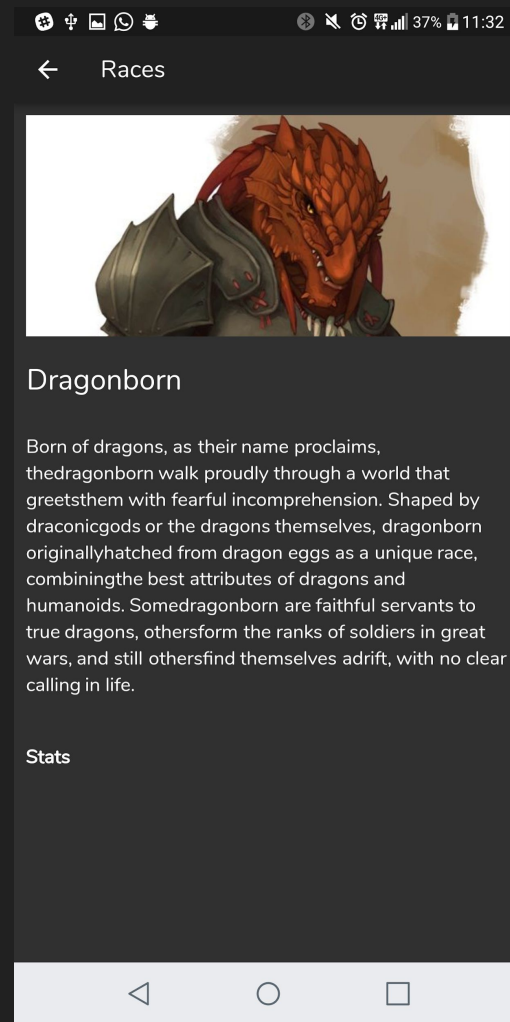
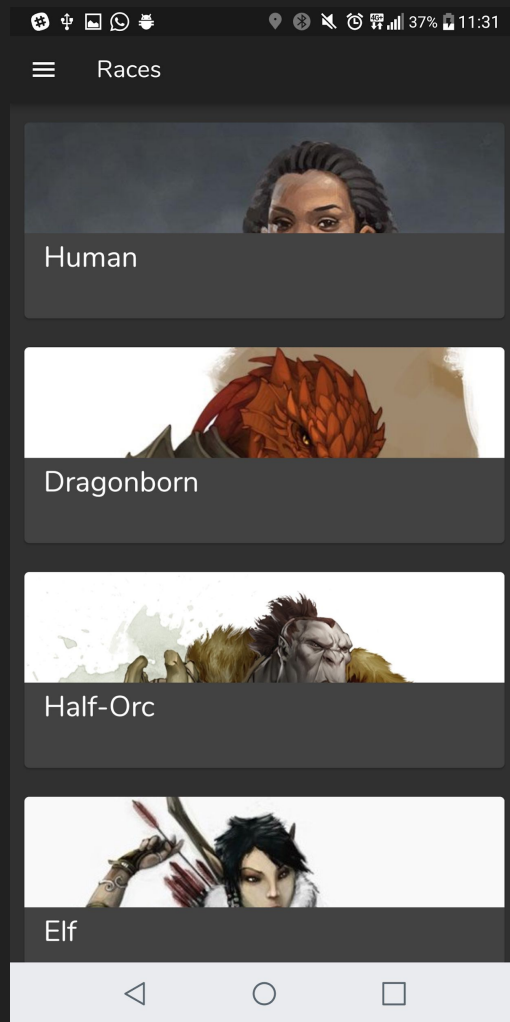
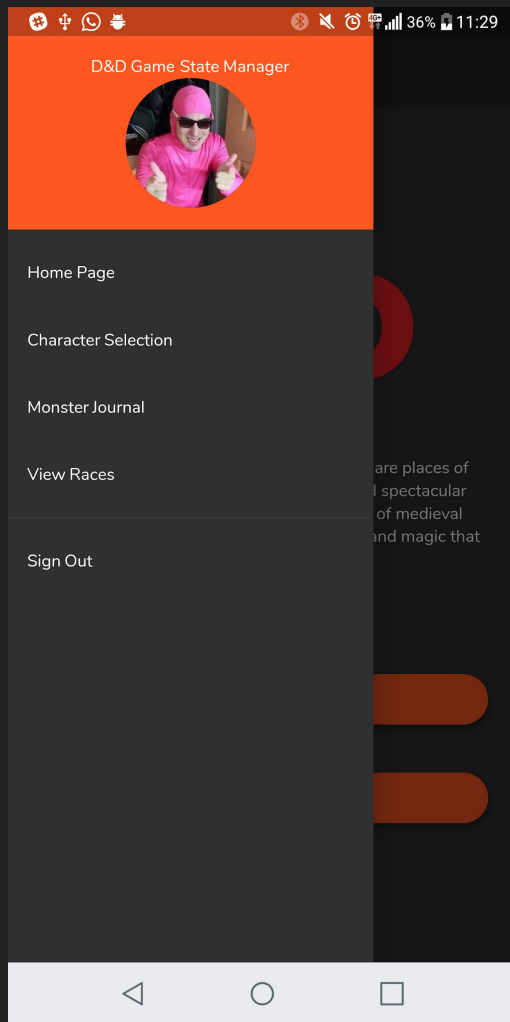
Dragon

True dragons are known and feared for their predatory cunning and their magic, with the oldest dragons accounted as ...

Using the system:

On the left side of the application, you will see the button for the navigation drawer. By clicking on it and expanding the drawer, you will be presented with a list of choices, some of which include: Home Page, Monster Journal, Race Viewer, Character Creation. By clicking on one of these, it will take you to the respective screen. On the Monster Journal page, you will be able to view all of the currently encountered monsters, and by clicking on the card displaying the monster image and a brief description, you will be able to see extra information about the monster such as stats, etc. The Race Viewer page works in the exact same way as the Monster Journal page, displaying lore and stats for the possible races in D&D (Note: only a few races and monster types are currently implemented as the application is still under development)

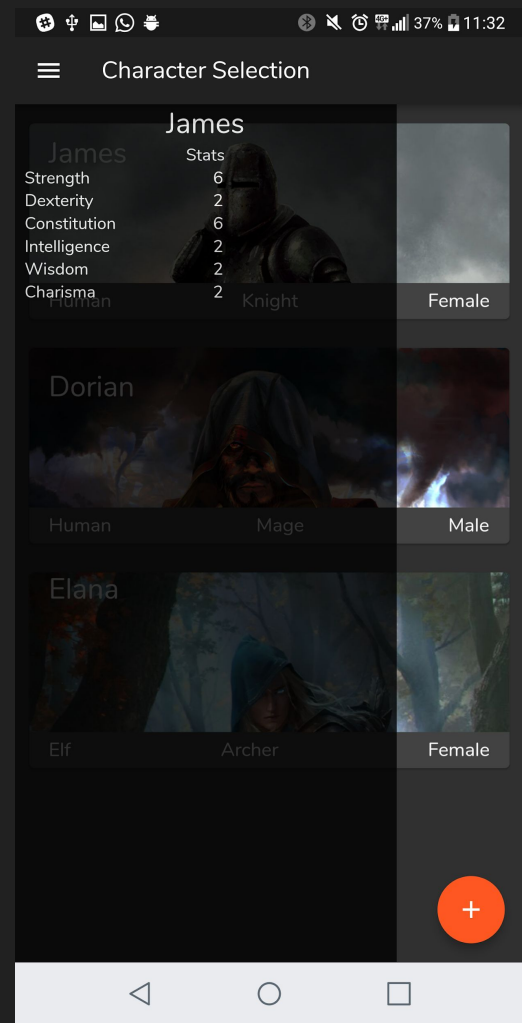
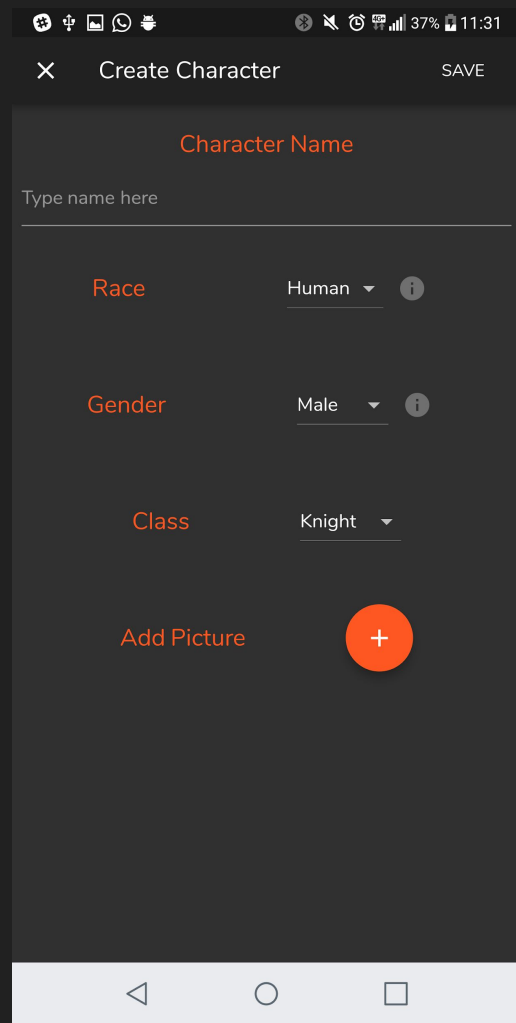
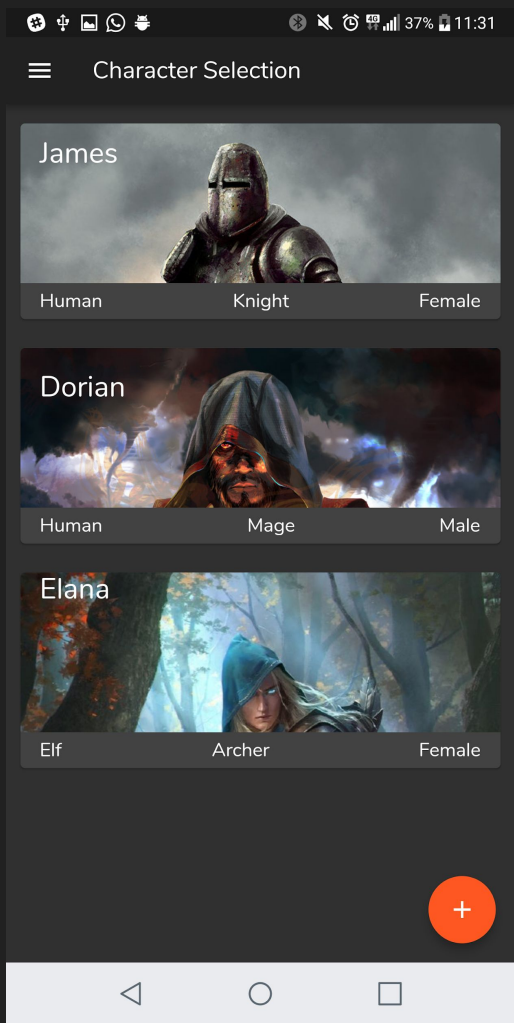




Using the system:

When a user wants to create a character, they will be taken to a character creation screen, where they can create a character by specifying a name for his character, choose a race, choose a gender, and choose a class. They also have the option of adding a custom image to their character. Next to each option, there is a small information button which when clicked will list the stats / stat modifies of a class and race so the user does not have to leave the screen to find these details. (Note: information button is currently only a mockup - actual functionality will be added at a later stage)

Once a user has created a character, they will appear in the character selection screen. Here they can either click on the character to get a detailed description of the character and their stats, or they can simply swipe from left to right over a character to bring up a small window which will show the character stats.

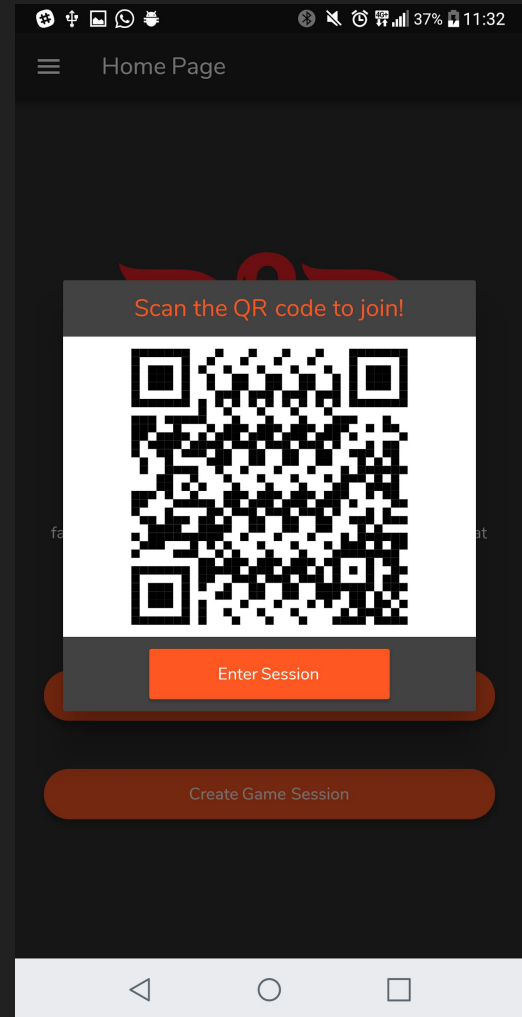
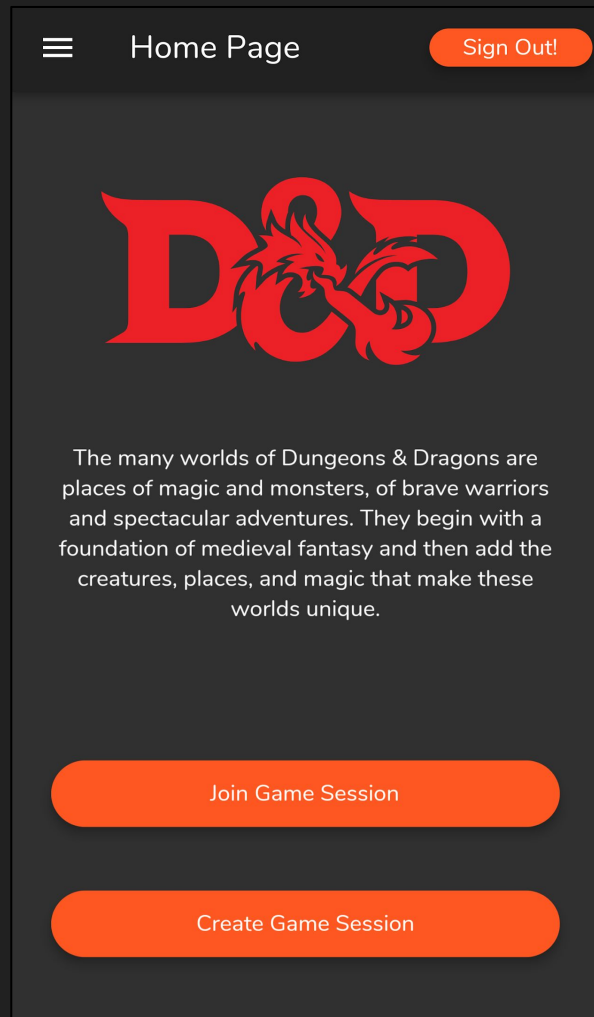


Using the system:

On the homepage, you will see two buttons: Join Session and Create Session. If you wish to create a session, you will take the role of the Dungeon Master automatically. The button will start the session creation process. Once a session has been created, a QR code will be generated on the Dungeon Master's device.

All players that are taking on the role of a normal adventurer, will then click Join Session, which will automatically open up their camera. All the user then has to do is scan the QR code generated by the Dungeon Master, and they will be taken to a screen which shows the session name, the host of the session (a.k.a. The Dungeon Master), and a list of all the other players currently in the session.

Once all players have joined the session, the Dungeon Master will click "Enter Session" where he will be taken to the same screen as the other users, and from here he will officially start the game session.



Troubleshooting:

If you choose to sign in with a Google Account for the first time, and then proceed to sign out, and wish to sign in with Google again later, it will automatically sign you in with the new Google Account that you used in the previous sign in process. If this happens, stop the application completely, and reopen it. When you now choose Google Sign in, it will bring the pop up box into view, showing all Google Accounts you have used before. When you sign out now and proceed to sign in again, it will follow the correct process of first asking which account you would like to use.