**Sprint Planning Document (Sprint 2)**

**Sprint Goal Backlog (Sprint 2)**

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**High-level Project Overview**

**Project Mission:**

1. Basketball SmartGlasses Analytics is committed to delivering live statistical information from the Synergy live sports API to the Brilliant Labs AR glasses over a Bluetooth connection established by a custom-built Android app from our team.  
     
     
   **Problems We Are Solving:**
2. Live statistical information is not readily available on the sideline in real environments.
3. Coaches frequently must go look at stats written down or on tablets, taking their eyes away from the game for precious seconds.
4. Assistant coaches and other staff cannot quickly sort, filter, and deliver relevant live statistical information to the head coach in real time.

**Project Overview (High-Level Features):**

1. **Android Application:**
   1. **Sign-in/up:** Users should be able to sign in with email/password or Google. Profile creation and customization.
   2. **Starting Lineup:** Have widgets available that show all players currently on the floor, access their statistics with a press of the button corresponding to their position.
   3. **Team stats:** Have a button available to view stats like team shooting percentage, rebounds, etc.
   4. **Transmit button:** After selecting relevant stats, send the stats to the glasses over Bluetooth
   5. **Establish Bluetooth connection:** Use Micropython API to connect to glasses
   6. **Connect to Synergy API:** Make api requests, store information in a database for use in the rest of the app (all the stat buttons listed above)
   7. **Run python code in Android App:** Use available libraries to compile executable python code for API access and Smartglass transmission
2. **Brilliant Labs Smartglasses**
   1. Connect over Bluetooth with a connection established by the android app, choose what information to send to the glasses and present it in a digestible manner.
3. **Backend Services**
   1. **Realtime Database**: Storing live data in the app for filtering and sending to the glasses.
   2. **API:** The team uses a service called Synergy for their live stat information.
   3. **Authentication:** The API has built in verification techniques like usernames and passwords to access the information.

**Sprint 2 Planning**

**Sprint 2 Goals:**

1. **Upgrade UI for App to include more features**
2. **Connect to Glasses using the Frame Utilities package for Python**
3. **Deploy app onto tablet and broadcast tablet on PC Screen**
4. **Run python Code in Android Studio**
5. **Create Synergy Account and Attempt Get Request of Data from Server**

**Sprint 2 Deliverables:**

1. **Upgrade UI for App to include more features:**
   1. **Assigned:** {Aiden Carroll, Ethan Schwalbach}
   2. Add buttons to UI for Glasses Connection, Get Request, and sending information to glasses (Don’t need to be functional, just present).
   3. Add player pictures, make UI screen easier to read and more pleasant to look at.
2. **Connect to glasses using the frameutil package for Python**
   1. **Assigned:** {Gabe Gros}
   2. Connect to Smart glasses using Python, show proof of connection.
      1. Used Bluetooth functionality in the frameutil package to establish connection to smart glasses
3. **Deploy app onto tablet and broadcast tablet on PC Screen:**
   1. **Assigned:** {Aiden Carroll}
   2. Create .apk file on android studio and configure developer mode on tablet.
   3. Use cable to transmit .apk file onto tablet and install/test app functionality on the tablet itself.
   4. Use scrcpy package to mirror android tablet screen on PC as a window so that tablet view can be presented to shareholder and professors.
4. **Run python Code in Android Studio:**
   1. **Assigned:** {Chris Hellen}
   2. After conducting research on Python in Android Studio during sprint one, create sample proof-of-concept code in python and execute it in android studio.
5. **Create Synergy Account and Attempt Get Request of Data from Server:**
   1. **Assigned:** {Kendall Hamm, Aiden Carroll}
   2. Work with Sponsor to create Synergy Sports API account, use available resources to interact with server and make requests
   3. Attempt to get a box score from a game using a get request provided by the API documentation written in Python, print request content reponse as proof of concept