Constraints / Limitations and How I Overcame Them

1. **Understanding and Using Firebase:**
   - **Constraint:** At the start of the project, I found it challenging to fully understand and implement Firebase, especially Firestore, for storing and retrieving events data. I struggled with connecting the app to the database, handling asynchronous operations, and ensuring data was updated correctly without errors.

   - **Solution:** To overcome this, I dedicated time to studying the official Firebase documentation, watched step-by-step tutorials, and created small test projects to experiment with CRUD (Create, Read, Update, Delete) operations. This hands-on practice helped me gain confidence, and I was able to successfully integrate Firebase into the app, ensuring that data is reliably stored, retrieved, and updated in real time.

2. **Implementing Interactive Features Smoothly:**
   - **Constraint:** Another challenge was creating interactive features, such as drag-and-drop components for events, while maintaining smooth performance. The app initially lagged when multiple interactive elements were used, which affected the overall user experience. Ensuring that these components were responsive and visually intuitive, especially on different devices, was tricky.

   - **Solution:** I overcame this by carefully optimizing the code, reducing unnecessary re-renders, and using lightweight libraries for drag-and-drop functionality. I also tested the features extensively across different scenarios to ensure they remained smooth, responsive, and user-friendly, providing an engaging experience without compromising app performance.