Project Free Real Estate

'); DROP TABLE TEAMS;-- & AppFolio

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Problem, Solution, & Innovation

- Staging a property with furniture is expensive and time consuming

- Current AR mobile apps have limitations

- Create iOS app offering more features than existing apps

  - Shared experiences & persistent scenes

Technical Details & Challenges

- React Native UI with ARKit backend written in Swift

  - React handles user input, Swift renders augmented reality

- Biggest challenge: interfacing Swift and React Native

  - React requires ViewManager instead of UIViewController

  - Problematic because ARKit is coupled with UIKit due to frontend-facing nature

Current Functionality

- **Overview:** Use menus to select furniture, place a spaceship on a plane

- **React Native Frontend:**

  - Style and furniture menu

  - Can pass information to backend about the item to be loaded

- **Swift Backend:**

  - Rendering - Place ship at coordinate tapped by user

  - Detecting - Identify and draw planes to attach furniture

Demo

Moving Forward

- Utilize persistent scenes to create presets

- Implement shared experiences for multi-user capability

- User interface

- Acquire large set of 3D models