PROJECT DESCRIPTION

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Project title: Interactive Augmented Reality Platform for Medical Education

Project description (typically 100 words):

The Augmented Reality (AR) Medical Education Tool is an innovative application designed to enhance the learning experience for medical students. Leveraging AR development tools like ARKit, ARCore, and Unity, this project aims to provide an interactive platform where students can visualise and manipulate 3D models of human organs on their smartphones or tablets. This tool will allow users to explore different anatomical layers, simulate medical procedures, and interact with the structures in a way that traditional learning methods do not offer.

List of requirements (objectives):

Essential

- **3D Model Visualization:** Develop accurate 3D models of human organs that can be viewed and interacted with in augmented reality.

- **Interactive Manipulation:** Allow users to manipulate 3D models, including rotation, zoom, and layer exploration, to understand the complexity of human anatomy.

- **Device Compatibility:** Ensure the platform is compatible with a range of mobile devices, including smartphones and tablets, running both iOS and Android operating systems.

Recommended

- **Medical Procedure Simulation:** Implement features that allow students to simulate medical procedures, enhancing their practical skills and understanding.

- **Interactive:** Design the platform to be more interactive, allowing the users to have both Audio and Video functionality for better understanding of the concepts

Optional

- **User Feedback Integration:** Include a feature for students to provide feedback on the AR models and simulations, enabling continuous improvement based on user experience.

- **Collaborative Learning:** Develop functionality that allows multiple users to interact with the same AR model simultaneously for group study sessions.

Date:13/06/2024   Date:

Student signature: Gopinath   Supervisor signature:

Convenor: John Drake