

MetaMed: Enhancing Medical Education through Immersive Virtual Reality

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Table Of Content

- Introduction
- Problem Statement
- Objective
- Diagrams
- Tools Used
- App Highlights
- Gantt Chart
- Demo

1. Introduction

Introduction

- A VR-based medical training platform
- Develop VR medical simulations with haptic feedback, enabling realistic training for medical students
- Reduce costs and ethical concerns associated with traditional surgical training methods

Problem Statement

- Safety Risks
- High Cost
- Limited Access
- Lack of Repetitive Practice
- Poor Collaboration

Objective

- VR Medical Simulations
- Guided Procedures
- Multi-User Capability
- Mobile Accessibility
- Collaboration

2. UML Diagrams

Use case Diagram

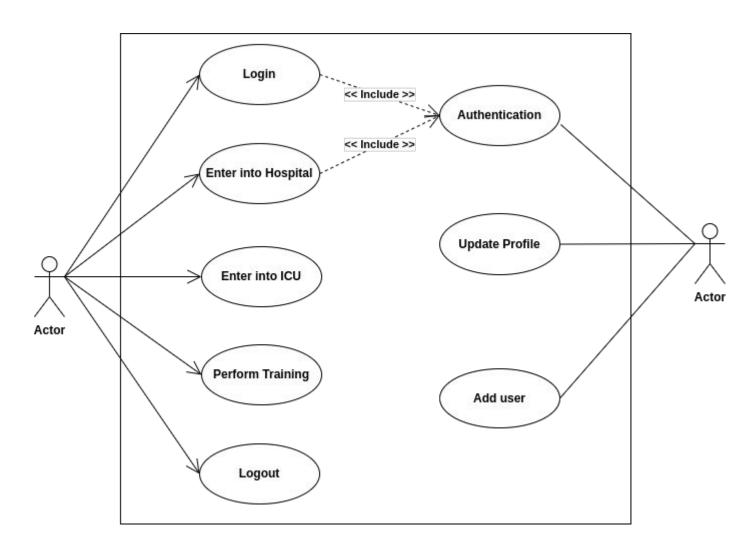
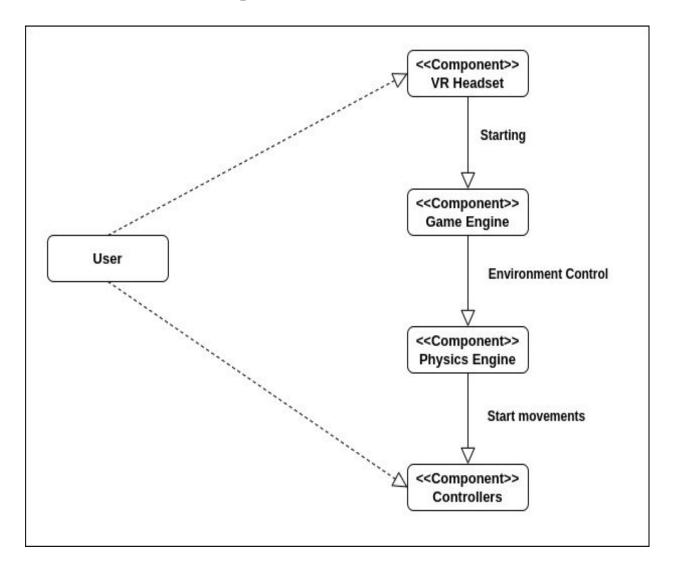


Fig.1 Use Case Diagram

Component Diagram



Fir. 2 Component Diagram

Workflow Diagram



Fig. 3 Workflow Diagram

Activity Diagram

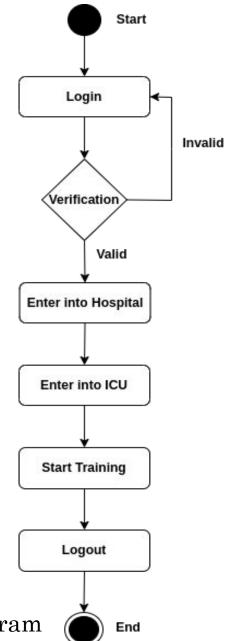


Fig.4 Activity Diagram

Tools Used

- Blender
- Unity 3D
- VR Headset
- Microsoft Visual Studio
- C#
- Photon (For Server for Multi user)

3. App Highlights

Main Entrance



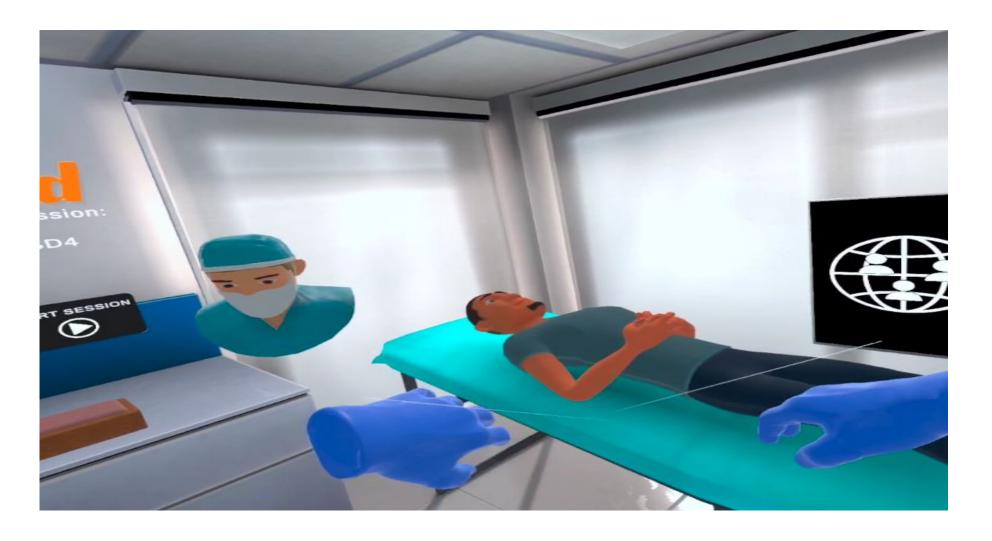
Fig.3 Hospital Main Entrance

User Manual



Fig.4 User Manual

Multi User



Fir.5 Multi user

Performing Tasks

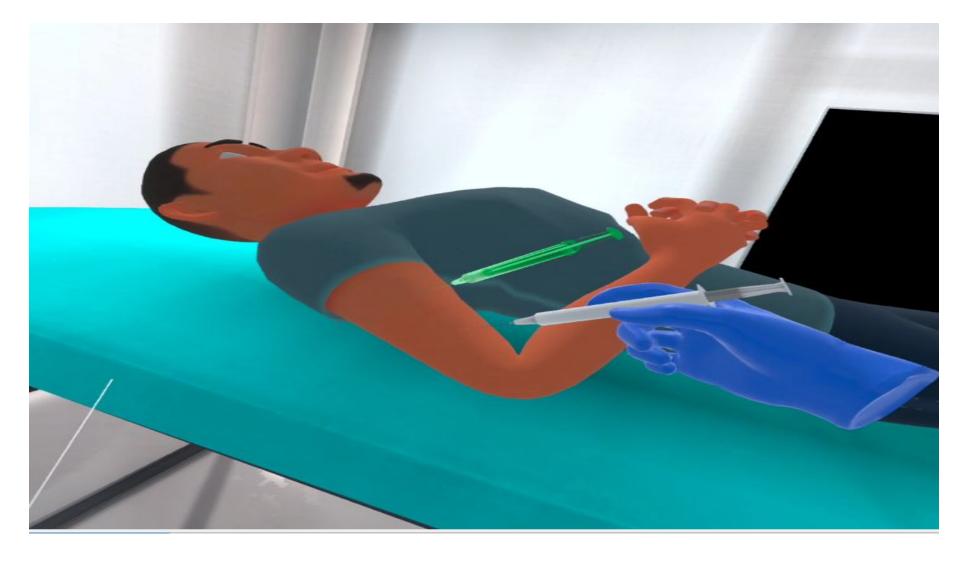


Fig. 6 Injection

Performing Tasks

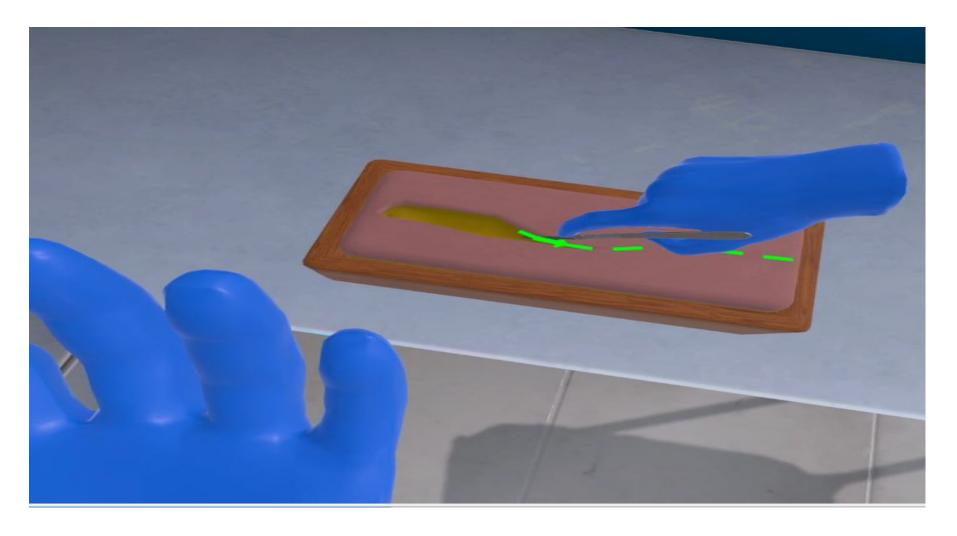
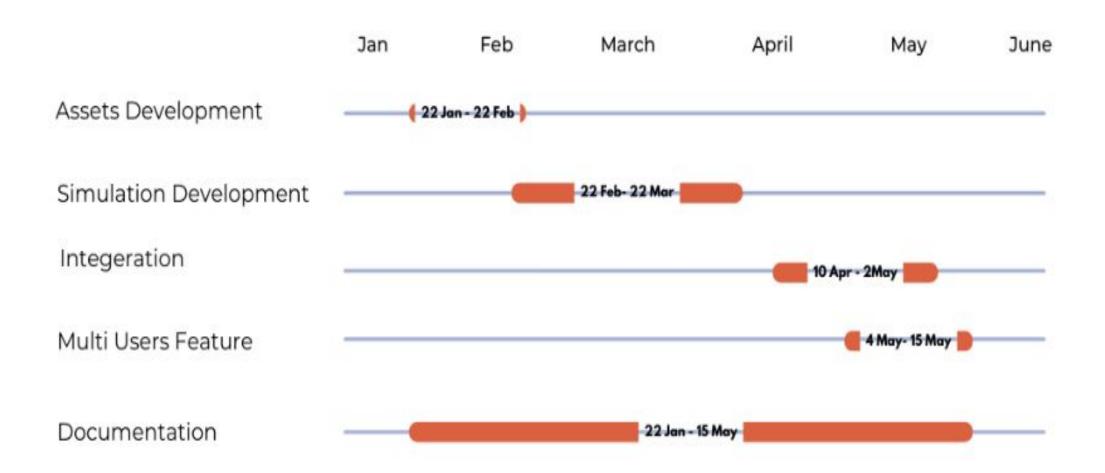


Fig.7 Performing cut

FYP-2 Gantt Chart

Meta Med



FYP-2 Gantt Chart

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4. Demo