NTT Data: Object Recognition with Augmented Reality

Team 34:

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Client : Praveen Selvaraj

Project Abstract

- Our project is designed to help medical professionals use medical devices by using smart glasses to create a hands-free helper. We use the smart glasses camera to perform object recognition on medical devices, display name of the object and overlay the instructions on the smart glasses.
- Smart Glasses with Object Recognition through Machine Learning
- Main Technologies
    a. Epson Smart Glasses
    b. Tensorflow
    c. Augmented Reality
    d. Epson Moverio SDK
    e. Photogrammetry to make models of objects
    f. Android Studio IDE

Achievement Table

ID	Requirements	Priority	State	Contributors
1	Object detection	Must	✓	Joseph
2	Receive instructions from database	Must	X	
3	Overlay instructions on object	Must	X	
4	Easy addition of new objects by admin	Must	X	
5	Retain existing features of original NTT app "sOps"	Should	X	
6	Change sOps to meet these new requirements	Should	X	
7	Good user experience	Should	X	
8	Not for specific Epson device, compatible with Android	Should	✓	Joseph
9	Improve UI of sOps	Could	X	
10	Responds to voice recognition	Could	X	
Key Functionalities (must have and should have)		**20%** completed		
Optional Functionalities (could have)		**0%** completed		

Team Contribution Slide

Work packages	Joseph	Xuanwei	Duncan
Client liaison	90%	0%	10%
Requirement analysis	50%	30%	20%
Research	60%	30%	10%
UI Design	80%	10%	10%
Programming	90%	10%	0%
Bi-weekly Report	90%	5%	5%
Website Editing	40%	40%	20%
Pitch Presentation	0%	0%	100%
Overall contribution	70%	15%	15%
Roles	Front End Developer, Website Design and Editing, Researcher, Report Writer, Client Liaison	Front End Developer, Website Editor, Researcher	Slide Designer, Pitch Presentation, Website Editor