2/9/2020

Graduation Project Documentation



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1. Introduction

- Most companies in Egypt does not consider implementing Vr/Ar solutions to assist in the company growth or to market its products.
- Mainly the project will be discussing the idea of virtual/augmented reality solutions for companies, regardless its products
- Companies can start using Vr/Ar to build systems where you can scan the items and it start
 creating a scene inside the user world, these scenes can be a cartoonish material for kids or
 facts about the product they are creating

2. Project summary

This project will be discussing one of these solutions to pharmacies, with it you will be able to scan any medicine instantly and locate where it's available at, know more about his side effects and even know what dosage to be taken and a lot more

3. Scenes

In the following section we will be discussing the scenes what will be included in the application starting from the start of the program till reaching the end and it will go as follow,

- The welcoming scene of the program showing the logo and two buttons to either select to scan or to know about the program
- About the program is just a scene to know the license date and contributions
- Next scene will be the camera trying to track the image target
- Final scene will be all the data collected like the dosage, branches of pharmacies that the medicine is located at and finally the side effects of this medicine

4. Flow of the application

The flow of the program will be simple and clear, when the user first opens the application it will show him the welcome scene where he can choose to scan a medicine or to know about the program, if he chose to scan a medicine a the camera access will appear and after accepting, the user will know be able to scan the medicine or if he chose to know more about the company a window will appear that has all the data of the company

After that he will try to scan the medicine barcode and when the program traces the barcode it will show him all related data related to this medicine

These data will include but not limited to

- A panel that show the medicine photo with some info about the medicine which includes
 - Tablet indications
 - Overdose
 - Dosage
 - Side effects
- A panel that show the medicine alternatives
- A 3d model that show the side effects on a human body for easier representation
- All pharmacies branches that the medicine is available at

Project graphics

This project will not include a lot of graphics and mainly it will include the UI canvas graphics which will include all the data for the scanned medicine

The main program will be flowing in the dark shaded blue color, next we will discuss every scene graphics

- Welcoming scene
 - The main background will include only the program Icon which is relatively resembles the pharmacies logo of the snake and the pole
 - As mentioned before the main theme is dark shaded blue with a simple touch of all grey shades and this appear in the button colors
- Main scene
 - This scene will start with the camera view then after scanning the medicine a UI canvas will appear
 - o The canvas will include all the data about the medicine
- About us scene
 - Mainly this scene will be a dummy scene just to make sure that there is a way that users know more about the program
 - The main concept about the engine is to develop movements and scanning that's why it may seem that the about us scene is not well designed

UI canvas will be mainly in dark shaded blue and with a touch of grey through the whole canvas

6. Project Development

In this section I will include all the related developments sequence and material that will be included in the project

- Firstly, Different scripts will be added to control the UI buttons actions like:
 - UI control scripts, controlling different buttons actions
 - Scripts to control the 3d models added to the canvas
- Secondly, I will add a dummy data set for pharmacies branches so I could test my program, it
 will include, branches details from number and location and will also add pictures for
 pharmacies

• Finally, the program will be running on Vuforia, that will give the accessibility to Ar development tools such as image recognition that will detect the bar code of the medicines

7. Developing schedule

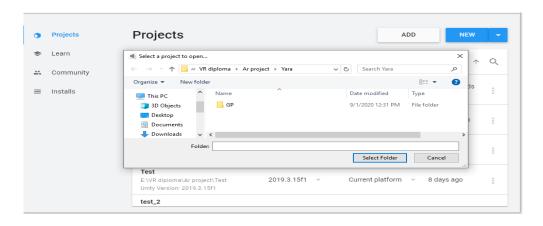
Date	Milestone to be achieved
Monday, August 25,	A protype for the product with one medicine data integrated
2020	 Working UI with minimum requirements of barcode scanning and presenting data
Monday, August 29, 2020	 Adding another interface to get back to scanning scene and the accessibility of scanning different medicines
Monday, August 31, 2020	 Finalizing the whole program and trying to add extra features like Guiding users to point the barcode to the camera to scan it Adding some minor details with colors and graphics
Monday, September 1, 2020	 Unit testing and integration testing of the program on different mobiles User testing with couple of family members and friends Fixing any glitches from user feedback

8. How to unpack the program

 Follow this link to a <u>Google Drive</u> and then right click the Dawa2y-SourceCode and press download



- 2. After choosing a suitable location for the file to be downloaded, Unzip the folder by clicking right click and then Extract to Dawa2y-SourceCode then wait for all files to be extracted
- 3. Open the unity hub, from the left panel press projects then press add, And copy and paste the folder path to unity hub



4. Select the folder and press select folder and wait for unity to upload the project with al it's packages, make sure you choose the right unity version when adding the project to unity Hub

9. How to use the program

- 1. After unpacking the program, build and run on an android phone (Make sure you switch the platform to android)
- 2. When the application run on the phone you get started with the welcome scene where you get to choose from two buttons to start scanning or to know about the program
- 3. If you choose to know about the program you will be redirected to as window to know more about the developing company and developer and you can return to the previous page by pressing the **X** button on the top right of the screen
- 4. If you choose to scan a medicine, you will be redirected to a window where your mobile will ask for use of the camera and after allowing you can scan the barcode of the medicine to see it's data