### Education development

PROJECT ID	
Name	Education development
Description	A Program that uses virtual reality glasses to facilitate the educational process
Sponsor	Ministry of communications and information technology
Project Team Resources	Hardware: 20 laptop - 5 servers



#### THE MAIN GOAL OF THIS PROJECT IS ....

Medical education is changing. Simulation is increasingly becoming a cornerstone of clinical training and, though effective, is resource intensive. With increasing pressures on budgets and standardization, virtual reality (VR) is emerging as a new method of delivering simulation. VR offers benefits for learners and educators, delivering cost-effective, repeatable, standardized clinical training on demand. A large body of evidence supports VR simulation in all industries, including healthcare. Though VR is not a panacea, it is a powerful educational tool for defined learning objectives and implementation is growing worldwide. The future of VR lies in its ongoing integration into curricula and with technological developments that allow shared simulated clinical experiences .This will facilitate quality interprofessional education at scale, independent of geography, and transform how we deliver education to the clinicians of the future.



#### THE MAIN GOAL OF THIS PROJECT IS ....

When activating the session:-

A full learner management system gives educators total control of training delivery, providing clinical experiences on demand to integrate seamlessly with curriculum requirements.

Running advanced simulation systems, (App's name) lets learners practice just like in real life.

Fully-immersive scenarios, artificial intelligence-driven patient behavior, adaptive communication, dynamic physiology and unique unwellness systems combine to deliver clinical experiences that feel real.Learners receive immediate, comprehensive feedback on technical and non-technical performance - including communication, teamwork and prioritization - without the need for faculty.

All learning is customizable to ensure institutions meet specific requirements.

Detailed metrics and intuitive dashboards allow learners to monitor and optimize performance.

Educators and managers can easily view all aspects of engagement and performance, identifying training needs and ensuring all learners reach the top of their license efficiently and effectively.

To the end and feedback from the behaviours of learners.



#### **Project scope:**

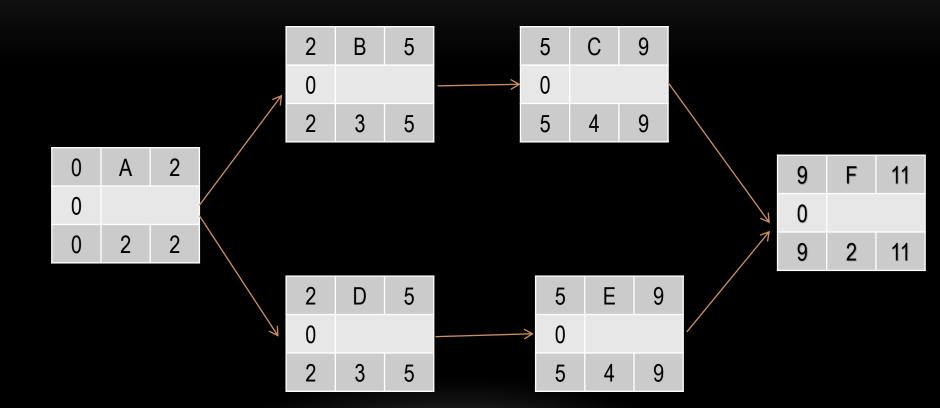
- 1- The purpose of the application is to facilitate the educational process using virtual reality glasses.
- 2- The project will be completed and the application tested for a period of 8 week at the level of Assiut University (faculty of medicine), and it will cost (500000 \$).
- 3- The role of the developers comes in the first stage in creating some applications for the faculties of universities and their stages, and using these applications and running them on glasses. We will need to collect sufficient data on all the faculties so that the necessary procedures are facilitated.
- 4- The application is made using the Java language, communicating with the glasses and conducting an experiment on the application, and later the network team begins to activate the application in all university faculties devices.
- 5- The system will be reviewed and monitored, as well as maintenance and repair of glasses in the event of any problem, for a period of one month from the start of use.

#### Project exclusions::



Time (Weeks)	Predecessor	Description	ID
2	None	Flutter	A
3	A	Backend	В
4	В	Frontend	С
3	Α	Hardware	D
4	D	Server	E
2	C,E	Wires and Switches	F







#### ED APP

team - 2flutter -2web developer	Time 2weeks	Budget 50000\$
2backend developer	Time  1week	Budget 20000\$
3frontend developer	Time  1week	Budget 20000\$

Hardware 20 laptop	Budget 40000\$	Time 2weeks
5 Server	Budget 100000\$	Time  2weeks
Wires and switches	Budget 20000\$	Time  1week



Total budget: 500,000\$ total time: 8 weeks

## **Gantt Chart**

ED	Q1 2021		Q2 2021		Q3 2021		Q4 2021	
	3 Nov	10 Nov	17 Nov	24 Nov	1 Dec	8 Dec	15 Dec	22 Dec
Planning								
Research								
Design								
Implementation								
Follow up								



# App for Education development

#### Start



1.1 Requirments

1.2
Doing Study
about the
glasses
&collect
necessary data

1.3
Plan the Project and Application

Hardware & Sofware

2

2.1 Bring the equipment

2.2 Operating System of Glasses 2.3 Testing

Glasses

**Execution** 

3

3.1
Dividing Tasks
3.2
Working on
creating the

app 3.3

Test Functions 3.4\_

Interface the Application

Final Tasks

4

4.1
Test the
Application
4.2
Explan and
Fixed Errors
4.3
Finish the
Application
4.4
Install and
activate the

application



RISKS	
Severity	Description
Low	Students do not accept changing their learning style
Low	Slow to understand new technologies
Medium	Some colleges refused to apply these techniques
High	Increase in the cost
High	Approval from the Ministry of communications and information technology
High	Weak university infrastructure
High	Exorbitant cost



SOLUTIONS	
Severity	Description
Low	The first year without fail, but there will be an evaluation
Low	Provides videos explaining how to deal with new technology
Medium	We clarify the idea of the project and the many positive aspects that benefit the faculty and students
High	We will make VR glasses in Egypt to reduce the cost
High	We will explain to the Ministry a schedule with specific goals to advance education
High	We will provide everything the project needs from the Internet



THE MEETING TIMES:
Every Sunday an online meeting.
Every Wednesday a meeting in the college.



#### **Team members:**

- 1- Moataz Ahmed Refaat abd ulbasset
- 2- Mostafa Mahmoud Ragab Hassan
- 3- Mostafa Hamouda Mohamed Ramadan
- 4- Moustafa Morad Ahmed Mohammed
- 5- Mahmoud wael Sayed Ahmed

