*Supplementary material for*



*Arab Open University*

*TM471: Telematics-Project*

Tutor-Marked Assignment 01 for Software Projects

TMA01- SP

Cut-Off Date: \_\_\_\_\_

Name of Student:………………………………..

Signature:…………………………………………...

Date:……………………………………………………

**Question 1:** Specific title and aim(s) for the project:

1. Specific title:

**University Group Application**

1. The aims of the project:
2. Type of the project’s output?

**Android Mobile application app**

1. List clearly the aims your project:

Joining many Students with Totter together in groups with automatically joining integrated systems.

Official communication application Arab Open University which that allow student and totter to send text massages, pictures, voice, video, and documents.

keeps students connected in a reliable and easy way in registered courses.

Care about privacy by using Student ID (101214xxxx) as user name instead of Personal Mobile phone number or other private identity details.

**Question 2:** Problem definition and suggested solution (**30 marks**):

1. Define the realistic and critical problem that has high level demand including the target customer: (15 marks)

The need for official communication method Accredited, Reliable and Easy under Main elite of managers, supervisors and doctors of Arab Open University to allow students use social media to access information about their courses. (Critical problems)

RE The student need to get the information he wants, to stay informed of updates and guidance faster by the material supervisor, continuously within the accredited educational aggregation. (Realistic problems)

RE Having more than one group available simulates the same material, it is make dispersion of student So that there a lot of unreliable source Publishes information to students. (Realistic problems)

The existence of external parties which they answer students' questions and guide them in an unauthorized way, unreliable tutorial which not within the AOU teaching staff. (Critical problems)

Many students care about privacy so they prefer to not use or share their mobile phone number which that transcend privacy unworthy for most of them. (Critical problems)

1. Provide clear, logical, and comprehensive suggested solution of the problem defined in part (1) (15 marks)

Create a multi-media platform instant massaging mobile application which that allow user to send text massages, pictures, voice, video, and documents by joining many users together in groups.

Each group represents a course that its users are students in that course which keeps students connected in a reliable and easy way.

With automatically joining integrated systems, the mobile application will join the registered user to their courses groups.

While not compromising the privacy and security, the app is going to be secured even without the need to use mobile number or other private identity details

**Question 3:** (Schedule for the project): The schedule should be well planned, and easy to follow. It should show that the student:

1. Clearly defined the stages, intermediate targets and milestones of the project
2. Built in some flexibility to allow for things not going to plan

**Question 4:** The Detailed Requirements Specification:

1. Functional Requirements – All your system functions (5 marks)

Functional Requirements

* **User Registration**user must be able to register for the application through a Student ID. On installing the application, with receive an authentication on university mail.
* **Joining Groups**

The application should join student to groups witch the course material has registered.

* **sending messages**

users able to send and receive chat and multimedia shearing (smiley, audio, photo, video, attached).

* **broadcast Message**

Administrator and totter Account have the ability to send broadcast messages to multi members.

1. Non-Functional requirements (5 marks)

* **Scalability:** the application be able to provide instant messaging service to many users at time with join many user and totters in different groups.
* **privacy:** messages shared between users by Student ID witch respect the privacy.
* **performance:** the application is lightweight and send messages, attached file instantly.
* **Integrity:** addresses consistency of data, the ability to prevent unauthorized modification or deletion of data.
* **Security:** make the application secure to deter unauthorized access and making access by account with in to type admin or users.

1. Software, Hardware and any other Requirements (5 marks)

The hardware, software, should have following requirements:

* Smart Phone equipment (touch screen, keypad, processor with speed 500MHz, camera, gallery, microphone and other services of mobile).
* Ability to Install Application from Stores
* Smart Phone must have at least 512MB RAM or above.
* Ability to connect to Wi-Fi or mobile network (3G,4G).
* Ability to exchange data via network.

he hardware, software and technology used should have following specifications:

• Ability to connect to the wifi or mobile network.

• Ability to exchange data over the network

• Touch screen for convenience or Keypad (in case touchpad not available)

• Processor with speed of 500 MHz

• Continuous power supply

• Ability to use camera, gallery, microphone and other services of mobile

• Ability to take input from user

• Device must have 512MB RAM or above

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**Question 5:** The Initial Design of the system (**25 marks**)

1. Provide the use case diagram of the suggested solution including deep and clear explanation of it. (8 marks)
2. Provide, at least, one of the following diagrams (flow chart, DFD, ERD, or any related diagrams) that represent the suggested operation of the system including deep and clear explanation. (15 marks)
3. What is/are the software or tools that are used to draw or design the diagrams in parts 1 and 2? (2 marks)

Drow.IO

**Question 6:** What work do you intend to carry out in the near future: (**5 marks**)

1. Identify what work student intend to complete in the near future (2 marks)
2. Justify why this is a priority (3 marks)

**General Notes:** The answers should be free of grammar, punctuation and spelling mistakes (**5 marks**)

**END OF TMA01**