

American International University-Bangladesh (AIUB)  
**Department of Computer Science  
Faculty of Science & Technology (FST)**

**Emergency Medical Services System**

By

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| **Semester: Spring\_21\_22** | | **Section:** | **Group Number:** | |
| SN | Student Name | Student ID | Contribution (CO1+CO2+CO3) | Individual Marks |
| 10 | APURBA DEBNATH | 19-41512-3 |  |  |
| 25 | MD. ABRAR SHARIAR LIFE | 20-42876-1 |  |  |
| 32 | ARITRA BHOWMICK | 20-43249-1 |  |  |
| 34 | MD. MASHADUL KABIR TUHIN | 20-43450-1 |  |  |
| 35 | MD. MAINUL HASAN PLABON | 20-43451-1 |  |  |

The project will be Evaluated for the following Course Outcomes

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| --- | --- |
| CO1: *Analyze* the impact of software engineering models over various context of software development to assess societal, health, safety, legal and cultural issues. | Total Marks |
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| Project Background Analysis and feasibility (needs, goal, benefits, etc.) [5 Marks] |  |
| Analysis the impact of societal, health, safety, legal and cultural issues [5Marks] |  |
| Existing Studies and Relevant Example [5Marks] |  |
| CO2: *Choose* appropriate software engineering model in a software development environment | Total Marks |
|  |
| Appropriate Process Model Selection and Argumentation with Evidence [5Marks] |  |
| Evidence of Argumentation regarding process model selection [5Marks] |  |
| Completeness, Spelling, grammar and Organization of the Project report [5Marks] |  |
| CO3: *Explain* the software project management roles and their skills in context of professional engineering practice and solutions to complex engineering problems | Total Marks |
|  |
| Project Role identification [5Marks] |  |
| Project Responsibilities descriptions [5Marks] |  |
| Submission and Defense the Project [5Marks] |  |

Description of Student’s Contribution in the Project work

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| --- |
| Student Name: APURBA DEBNATH  Student ID: 19-41512-3  Contribution in Percentage (%): 20%  Contribution in the Project:   * Background to the problem * Solution to the problem * Process Model and role   Apubra  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature of the Student |
| Student Name: MD. ABRAR SHARIAR LIFE  Student ID: 20-42876-1  Contribution in Percentage (%): 20%  Contribution in the Project:   * Background to the problem * Solution to the problem * Process Model and role   Life  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature of the Student |
| Student Name: ARITRA BHOWMICK  Student ID: 20-43249-1  Contribution in Percentage (%): 20%  Contribution in the Project:   * Background to the problem * Solution to the problem * Process Model and role   Aritra  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature of the Student |
| Student Name: MD. MASHADUL KABIR TUHIN  Student ID: 20-43450-1  Contribution in Percentage (%): 20%  Contribution in the Project:   * Background to the problem * Solution to the problem * Process Model and role   Tuhin  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature of the Student |
| Student Name: MD. MAINUL HASAN PLABON  Student ID: 20-43451-1  Contribution in Percentage (%): 20%  Contribution in the Project:   * Background to the problem * Solution to the problem * Process Model and role   Plabon  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature of the Student |

# PROJECT PROPOSAL

## Background to the Problem

Now a days, emergency medical service is not available in every corners in the world. There is lot of problems of getting emergency medical services. Such as, most of the time in emergency cases doctors, nurse, medicines, ambulance are not available. There is lack of communication distance. Most of the time doctors are not co- operative with their patient. They cannot provide much of time properly. In emergency cases most of the time we see that patient are not getting their emergency medicine from home. In most of the cases in rural people cannot get their emergency treatment. Most of the time we can see that there are signing problem in the app and also are not users friendly to everybody. Most of the time in unexpected situation in emergency medical services people cannot get their proper service. In emergency situation if anyone cannot get their proper services there is risk of life of patients and our app demand will be failure. If we fail to give the services which are mentioned above people are facing a lot of problems and our emergency services will be failure to everybody.

## Solution to the Problem

The main purpose of this project is to provide emergency medical service at our door steps. By properly connecting patients, doctors, hospitals, ambulance, medicines through this system to provide emergency medical services. To ensure doctors, nurses, medicine, ambulances availability in the time of emergency situation. Most of the problems can be solved by ensuring this things. The system is non profitable services. Users can sign up as a patient or provider. Our Database Administrator manages all user’s information. After signing up, user can login as patient or provider. Patient can search for medical services under different categories like ambulance, first aids, kits or nurse. Patient can request for any services available. Patients can pay online or pay on cash after getting the services. Providers can see all the details about the services they own. Providers can see all the requests from patients and checks if the services are available to them. After getting a request, providers prepare the services that are requested and requests any workers near them who are registered in our system to deliver the services. Workers gets the services and delivers them to the patient. All kind of users who want to get emergency medical services. They will be benefited by getting their proper emergency medical services through this system. In rural areas, rural people can get our services. Rural people cannot afford with high expensive doctor. They don’t know how to deal with them. By our system they can communicate with all types of consultant and get their proper treatment. By our system medical science is reached in rural areas. DocTime, Shebaghar etc are familiar with our system. They have lot of problems with their services. Such as, after opening first time they are showing server error. They are not user friendly system. They are not provide 24/7 services. They have problem on online payment system. Mentioned above all this problems our system is more helpful then others. We ensure to provide 24/7 services to everybody. Our system is user friendly and there is no technical errors and also no sign in issue. DocTime is one of the most common problem in android operating system. Usually when you open an app, you will see a black screen for few seconds and then app will crash with or without an error message. There are few ways to fix this problem. Most of the times, it might be a temporary loading issue. We just need to press the recent applications menu (usually the first left button) in our phone. Then we close the app that has this issue. Other software are able to provide specific kinds of problems. In our system all kinds of emergency medicine problems have been solved. Anyone can get their emergency medical issues in our system.

# SOFTWARE DEVELOPMENT LIFE CYCLE

## Process Model

The nature of our project is emergency medical service based software and our environment is adaptive because it allows changes at the middle of the development and our model is Rational Unified Process Model (RUP).

Our model is Rational Unified Process Model (RUP) and it is adaptive environment so we can change at the middle of our development in project because we may need added more feature in future for the project development. It has inception, elaboration, construction and transition phases. Activity can go two or more phases. We can do our activities in two or more phases. It is different for all of models because it has disciplined business modeling, requirement, analysis and design, implementation, test, deployment etc. We can divided inception ,elaboration, construction, transition in many iterations. Because in this model we can inception, elaboration, construction and transition phases .Activity can go two or more phases.

## Project Role Identification and Responsibilities

Patient, provider, delivery are the roles/ stakeholders .

Patients: can requests services, check availability, choose medicine, confirm request pay bill. Provider: can receive request, check availability, accept request ,make payment ,dispatch delivery.

Delivery: can receive delivery, confirm address, verify payment, confirm delivery.