

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

**PROJECT TITLE**

A Software EngineeringProject Submitted

By

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| --- | --- | --- | --- | --- |
| **Semester: Spring\_21\_22** | | **Section:** | **Group Number:** | |
| SN | Student Name | Student ID | Contribution (CO1+CO2+CO3) | Individual Marks |
| 01 | Sheikh Muhtasim Nasif | 20-42119-1 |  |  |
| 02 | Mysara Nur Tanha | 20-42261-1 |  |  |
| 03 | Tanima Islam | 20-42278-1 |  |  |
| 04 | Nabil Mohammed | 20-42299-1 |  |  |
| 05 | Md Salim Sadman | 20-42303-1 |  |  |

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 |
|  |
| Project Background Analysisand feasibility (needs, goal, benefits, etc.)[5Marks] |  |
| 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:  Student ID:  Contribution in Percentage (%):  Contribution in the Project:   * Contribution Description 1 * Contribution Description 2   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature of the Student |
| Student Name:  Student ID:  Contribution in Percentage (%):  Contribution in the Project:   * Contribution Description 1 * Contribution Description 2   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature of the Student |
| Student Name:  Student ID:  Contribution in Percentage (%):  Contribution in the Project:   * Contribution Description 1 * Contribution Description 2   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature of the Student |
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| Student Name:  Student ID:  Contribution in Percentage (%):  Contribution in the Project:   * Contribution Description 1 * Contribution Description 2   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature of the Student |

# PROJECT PROPOSAL

## Background to the Problem

Our project is about the advanced healthcare system of Bangladesh. In the present COVID-19 situation, many of the patients are unable to consult doctors, even some are afraid to go to hospitals. Many of the COVID patients are unable to test due to the unavailability of the testing equipment in their respective areas. In our country, highly qualified doctors usually don't want to live in rural areas. As a result, our rural people don't get proper healthcare. In our country, people often use different medicine for treatment. Also, some diseases are not curable by the regular use of medicine. Even in today's era, the rate of mother and child death is extremely high. It is because they do not get proper treatment or advice. In teenage, kids have to go through physical and mental change and often feel shy to share any kind of problems with their parents or family members. Due to visa issues, sometimes foreign people face difficulty treating them during emergencies causing the worst injury situation or sometimes fatal occurrence. Our country is still not advanced in medical science. Elderly people often get issues remembering the medicine schedule and the appointment list. Sometimes, in a fatal accident, blood transfer often becomes a life-saving matter. In the hospital, brokers often harassed the patients near one for the blood issue and takes unnecessary money as a change.

**1.2 Solution Of this Problem**

As our medical science is as not as advanced, it is considered to get a proper solution for the software which may not be provided by other medicine software. The solutions are as follows:

This project will enable the door-to-door service during this global pandemic situation by giving all nursing facilities. We will introduce telemedicine services so that rural people can also consult highly qualified doctors via video call. We will allow the people to choose their medicine type (Ayurvedic, Homeopathic, Yunani, allopathic) according to their preference as there is no perfect software for the individual medicine type so far. To reduce the mortal rate of mother and infant, the software has its system to help the mother and infant in a critical situation and warn the hospital about the upcoming emergency. It will also provide child care for newborn babies and also help children to get vaccinated. We will provide a 24/7 helpline for teenagers to consult about their physical and mental problems. Also, we will provide a helpline for women to consult about their physical problems. During an international medical transfer, the software will register international patients to get rid of problems they might face during visa registration. During any emergency at any time, if a person wants to get medical assistance or medicine, the system will track and provide a list of the nearest medical center to provide medicine. There is much more action for the people to ensure the proper visit to the doctor by getting a notification in just a blink of an eye. The blood bank has a dark side business to harass the patient's relative during an emergency, but the software will ensure that anti-black market during blood transfer issue.

**2. SOFTWARE DEVELOPMENT LIFE CYCLE**

## 2.1 Process Model

The model is going to be provided for this project is a saw tooth model. It’s a liner model. The environment is Predictive environment. Which means we will have a clear idea about the end product. The reason behind choosing the Liner model because we first ensure the 100% completeness of the previous steps. It’s a most simple environment for development for such project. Which means there will be no change comes during development. Again, the risk factor or failure for higher steps are minimum. Also, we have clear idea about the requirement, so it’s quite unnecessary to make a certain change during development. Although, there are several models for the liner model, but we most prefer Saw Tooth model where we will provide a prototype after each step of the development phase. Which ensures the more acceptance of the customer and make sure that the customer has idea what’s going on the software. Each time compilation is much time consuming or some development may have no idea what’s going on. And its mostly ensure develops our time of delivery issue.

## 2.2 Project Role Identification and Responsibilities

* Identify all the roles/stakeholder in the software/project management activities in software development.
* Describes the responsibilities of the role in the software development.

**Text Format:**

* Style: Times New Roman
* Size: 12
* Space: 1.0
* Alignment: Justify
* Length: Maximum 6pages (including cover page)

## Rubric for Project Assessment (CO1)

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| --- | --- | --- | --- | --- | --- |
| Marking Criteria | Marks Distribution (Maximum 3X5=15) | | | | Acquired Marks |
| **Inadequate (1-2)** | **Satisfactory (3)** | **Good (4)** | **Excellent (5)** |
|  |  |  |  |  |  |
| Background  Analysis | No background information regarding the project is  given; project goals and benefits are  missing. | Insufficient background information is given; project goals and benefits are  poorly stated | Sufficient background information is given; the purpose and goals of the project are explained. | Thorough and relevant background information  is given; project goals are clear and easy to identify. |  |
| Analysis the impact of societal, health, safety, legal and cultural issues | Student vaguely discuss the impact of societal, health, safety, legal and cultural issues in their project | Student provided with partial relevance to the impact of societal, health, safety, legal and cultural issues in their project | Student fairly provided the analysis to the impact of societal, health, safety, legal and cultural issues in their project | Student comprehensively provided the analysis to the impact of societal, health, safety, legal and cultural issues in their project |  |
| Existing Studies and Relevant Example | Ambiguous representative example. | Partially identify / indicate towards real-life example. | Real-life example is fairly connected towards the definition. | Comprehensively defend with real life example. |  |
| Acquired Marks: | | | | |  |
| CO Pass / Fail: | | | | |  |

## Rubric for Project Assessment (CO2)

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| --- | --- | --- | --- | --- | --- |
| Criteria | Marks distribution (Max 3X5= 15) | | | | Acquired  Marks |
| **Inadequate (1-2)** | **Satisfactory (3)** | **Good (4)** | **Excellent (5)** |
|  |  |  |  |  |  |
| Argumentation of Model selection | Does not articulate a position or argument of choosing appropriate model | Articulates a position or argument for choosing models that is unfocused or ambiguous | Articulates a position or argument of choosing models that is incomplete or limited in scope | Clearly articulates a position or argument for the choosing software engineering models |  |
| Evidence of Argumentation | Does not present any evidence to support the arguments for the choice of the model | Presents incomplete/vague evidence to support argument for model choice | Does not present enough evidence to support the argument for the choice of the model | Presents sufficient amount of evidence to support argument for the model selection |  |
| Completeness, Spelling, grammar and Organization of the Project report | Project report is not complete and Several errors in spelling and grammar. Present a Confusing organization of concepts, supporting  arguments, and  real-life example.  Sentences rambling, and details are repeated | Some errors in spelling and grammar. Some problems  of organizing the answer in a logical order of defining,  elaborating, and providing real-life examples | Few errors in spelling and grammar. Presents most of the details in a logical flow of  organization in  definition,  details, and  example | Project report is complete and No errors in spelling and grammar. Consistently  presents a logical  and effective  organization of  definition,  details, and real-  life example of  the topic |  |
| Acquired marks: | | | | |  |
| CO Pass / Fail: | | | | |  |

## Rubric for Project Assessment (CO3)

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| --- | --- | --- | --- | --- | --- |
| Criteria | Marks distribution (Max 3X5= 15) | | | | Acquired  Marks |
| **Inadequate  (1-2)** | **Satisfactory (3)** | **Good (4)** | **Excellent (5)** |
| Role identification | Does not identify any roles in the project management activities | Identify few roles in the project management | Identify most of the roles in the project management | Identify all of the roles in the project management activities |  |
| Responsibility Allocation | The project has poor project management plans for assigning the responsibilities | Some of the roles are left alone with any project responsibilities | Few of the roles are left alone with any project responsibilities | Well planned project with proper resource allocation |  |
| Viva | Unable to answer the basic questions and lack of knowledge regarding software engineering concepts and overall project knowledge | Have little understanding of the software engineering concepts and overall project knowledge | Have fair understanding of the software engineering concepts and overall project knowledge | Have clear understanding of the software engineering concepts and overall project knowledge |  |
| Acquired marks: | | | | |  |
| CO Pass / Fail: | | | | |  |