

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

**PROJECT TITLE**

A Software Engineering Project Submitted

By

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| --- | --- | --- | --- | --- |
| **Semester: Fall\_24\_25** | | **Section:** | **Group Number:** | |
| SN | Student Name | Student ID | Contribution (CO3+CO4+CO5) | Individual Marks |
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The project will be evaluated for the following Course Outcomes



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| **CO3:** ***Select* appropriate software engineering models, project management roles, and their associated skills for the complex software engineering project and evaluate the sustainability of developed software, taking into consideration the societal and environmental aspects** | Total Marks | |
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| Appropriate Process Model Selection and Argumentation with Evidence | [5 Marks] |  |
| Evidence of Argumentation Regarding Process Model Selection | [5Marks] |  |
| Analysis of the impact of societal, health, safety, legal, and cultural issues | [5Marks] |  |
| Submission, Defense, Completeness, Spelling, grammar, and Organization of the Project report | [5Marks] |  |
| **CO4: *Develop* a project management plan to manage software engineering projects following the principles of engineering management and economic decision process** | Total Marks | |
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| Develop the project plan, its components of the proposed software products | [5Marks] |  |
| Identify all the activities/tasks related to project management and categorize them within the WBS structure. Perform detailed effort estimation correspond with the WBS and schedule the activities with resources | [5Marks] |  |
| Identify all the potential risks in your project and prioritize them to overcome these risk factors. | [5Marks] |  |
| **CO5:** **Perform as an effective team member or leader in diverse team settings and solve multi-disciplinary problems in the computer science and engineering domain** | Total Marks | |
|  | |
| Taking project responsibility: perform assigned tasks on time independently | [5 Marks] |  |
| Contribution to project group meetings, sharing fruitful ideas | [5Marks] |  |
| Positive attitude towards group work, collaboration, compromise, helping others to understand their project work responsibility | [5Marks] |  |
| Showing respect and value towards other team member's opinion | [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 |
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# PROJECT PROPOSAL

## Background to the Problem

* Write the background description that helps putting your project into the right context of a problem domain and gives everyone involved a common view of the project.
* What is the root cause of this problem? Why this problem is so important to consider?.

## Solution to the Problem

* Describe what is your project/thesis objective? What solutions are you going to provide to solve the above-mentioned problems?
* What are the solutions you are going to propose to deal with the problem? why is this solution is particularly appropriate to solve the problem? Is the solution feasible to the meet the business objective?
* Describe the basic functionalities of your proposed solution that makes the best use of state‐of‐art technology and produced a significant result that is likely to have a major impact on societal, health, safety, legal and cultural issues. Provide a deep insight that demonstrate and preset a creative solution to the real‐life problem.
* Describe the target group of users of your solution? And how they will be benefited by your proposed solution to the problem?
* Describe the contribution of your project to the development of scientific results that is identified and well documented.
* Provide a literature review on what are the other studies that have discussed the same topic of yours in the literature and explain how your study has utilized and extended the problems of existing studies.
* Provide a description of all the existing studies presented in the problem area. What are the existing software solutions (for project) are available to solve the aforementioned problems?
* What are the existing software solutions are available to solve the aforementioned problem? And how your proposed solution is going to extend them in providing more benefits to the users?

# SOFTWARE DEVELOPMENT LIFE CYCLE

## Process Model

* Provide an analysis regarding the nature and environment of the software that you are going to develop and select the best suitable method(s) to develop the software.
* Present your arguments based on your analysis about why your selected method(s) is the best choice among all other methods to develop your proposed software.
* Presents sufficient amount of evidence to support argument for your model selection in developing your proposed solution.

## 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 6 pages (including cover page)

## 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)** |
| Selection of Software Engineering Models | Does not articulate a position or argument of choosing appropriate model. Does not present any evidence to support the arguments for the choice of the model | Articulates a position or argument for choosing models that is unfocused or ambiguous. Presents incomplete/vague evidence to support argument for model choice | Articulates a position or argument of choosing models that is limited in scope. Does not present enough evidence to support the argument for the choice of the model | Clearly articulates a position or argument for the choosing software engineering models. Presents sufficient amount of evidence to support argument for the model selection |  |
| Role identification and Responsibility Allocation | The project has poor project management plans for identifying roles and assigning the responsibilities | Identify few roles in the project management where some of the roles are left alone with any project responsibilities | Identify most of the roles in the project management and assign their responsibilities | Well planned project with proper role identification and responsibility allocation in the project management activities |  |
| Impact identification |  |  |  |  |  |
| Formatting and Submission | 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 (CO4)

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| Marking Criteria | Marks Distribution (Maximum 3X5=15) | | | | Acquired Marks |
| **Inadequate (1-2)** | **Satisfactory (3)** | **Good (4)** | **Excellent (5)** |
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| Project Planning | 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. |  |
| Effort Estimation and Scheduling | 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 |  |
| Risk Management | 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: | | | | |  |
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| **CO5 [PO-i-2]: Perform as an effective team member or leader in diverse team settings and solve multi-disciplinary problems in computer science and engineering domain.** | | | | |
| **Assessment Attribute/Criteria** | **Missing/ Incorrect (0)** | **Inadequate  (1)** | **Satisfactory (2)** | **Excellent (3)** |
| **Taking**  **responsibility** | Does not perform assigned tasks; often misses meetings and, when present, does not have anything constructive to say; relies on others to do the work; | Partially performs all assigned tasks; attends meetings irregularly and occasionally participates and hence not reliable; | Performs all assigned tasks; attends meetings regularly and usually participates effectively.  generally reliable; | Performs all tasks very effectively; attends all meetings and participates enthusiastically; very reliable. |
| **Contributions** | Never provides useful ideas when participating in a group discussion | Rarely provides useful ideas when participating in a group discussion | Sometimes provides useful ideas when participating in a group discussion | Routinely provides useful ideas when participating in a group discussion |
| **Collaboration and Ability to Compromise** | Not cooperative, unable to compromise and disrupts the team process. | Sometimes cooperative, and rarely displays a positive attitude. | Usually cooperative, able to compromise and generally display positive attitude. | Always cooperative. Willingness to compromise. Always display positive attitude. |
| **Valuing other**  **team members (Working with others)** | Often argues with teammates; doesn't let anyone else talk; occasional personal attacks and "put‐downs"; wants to have things done his way and does not listen to alternate approaches. | Seldom listens to others' points of view; occasionally behaves in an oppressive manner; tries to force their own ideologies on other. | Generally, listens to others' points of view; always uses appropriate and respectful language; tries to make a definite effort to understand others' ideas. | Always listens to others and their ideas; helps them develop their ideas while giving them full credit; always helps the team reach a fair  decision. |