

	DEPARTMENT OF COMPUTER SCIENCE		ASSESSMENT PERCENTAGE: 15%	
	SUBJECT: SOFTWARE ENGINEERING			
	ASSESSMENT: ASSIGNMENT	CODE: CSC4311		
	SESSION: 2024/25	DURATION: 2 Weeks		

Instructions:

1. This is a group project. Each group should **CHOOSE ONE** software project and submit a proposal latest on **15th May, 2025**.
2. You are to develop the software project using any of the **GIVEN** software process model.
 - Group A to use Waterfall model
 - Group B to use Prototyping model
 - Group C to use Iterative Model
 - Group D to use Spiral
 - Group E to use Agile
 - Group F to use Waterfall model
 - Group G to use Prototyping model
 - Group H to use Iterative Model
 - Group I to use Spiral
 - Group J to use Agile
3. Collect and compile each of the software development lifecycle stages of your chosen software project.
4. The duration to complete the report is **two (2) weeks**. Submission date is on **29th May, 2025**. Presentation date is on **2nd June, 2025**.
5. The project report (maximum of 15 pages) should be submitted in hardcopy (only one).
6. Refer appendix A for the sample of Report Front Page.

APPENDIX A

	DEPARTMENT OF COMPUTER SCIENCE		ASSESSMENT PERCENTAGE: 15%	
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	DEPARTMENT OF COMPUTER SCIENCE
	FACULTY OF NATURAL & APPLIED SCIENCES
	UMARU MUSA YAR'ADUA UNIVERSITY KATSINA

CSC4311: SOFTWARE ENGINEERING

PROJECT TITLE:

TIME TABLE SCHEDULER SYSTEM FOR ACADEMIC ORGANIZATION

LECTURER:

DR. AMINU AMINU MUAZU

GROUP TITLE: GROUP A

MEMBERS NAME:

- | | |
|-------------------------|----------------|
| 1. ABDULLAH AMINU AMINU | U1/16/CSC/0001 |
| 2. AMMAR AMINU AMINU | U1/19/CSC/0002 |
| 3. AMATULLAH AMINU | U1/22/CSC/0003 |
| 4. FATIMA AMINU AMINU | U1/24/CSC/0004 |

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RUBRIC FOR ASSIGNMENT

CATEGORY	CRITERIA	FULL MARKS
Presentation	Eye contact	2
	Slide/Teaching aid available	2
	Relevant to the topic presented	3
	QnA/Discussion	2
Report	Technical contents	2
	In depth explanation	3
	Formatting	1
TOTAL		15

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REMEMBER THAT:

Waterfall

It's useful when the requirements are clear, or following a very structured process as in critical systems which needs a detailed, precise, and accurate documents describes the system to be produced.

Not good when requirements are ambiguous, and doesn't support frequent interaction with the customers for feedback and proposing changes. It's not suitable for large projects that might take long time to be developed and delivered.

Prototype

Again, it's an early sample, or release of a product built to test a concept or to act as a thing to be replicated or learned from.

This is very useful when requirements aren't clear, and the interactions with the customer and experimenting an initial version of the software results in high satisfaction and a clearance of what to be implemented.

It's downsides are, good tools need to be acquired for quick development (like coding) in order to complete a prototype.

In addition, the costs for training the development team on prototyping may be high.

Incremental & Iterative

They're suited for large projects, less expensive to the change of requirements as they support customer interactions with each increment.

Initial versions of the software are produced early, which facilitates customer evaluation and feedback.

They don't fit into small projects, or projects that waterfall are best suited for; A structured process with a detailed, and accurate description of the system.

Spiral

It's good for high risky or large projects where the requirements are ambiguous. The risks might be due to cost, schedule, performance, user interfaces, etc.

Risk analysis requires highly specific expertise, and project's success is highly dependent on the risk analysis phase. It doesn't work well for smaller projects.

Agile

It suits small-medium size project, with rapidly changes in the requirements as customer is involved during each phase.

Very limited planning is required to get started with the project. It helps the company in saving time and money (as result of customer physical interaction in each phase). The daily meetings make it possible to measure productivity.

Difficult to scale up to large projects where documentation is essential. A highly skilled team is also needed.

If team members aren't committed, the project will either never complete or fail. And there's always a limitation in time, like in increments, meetings, etc.