REFLECTION

GROUP N

How the lectures helped:

Topic 1: Spiral Model (LO2 30 – 37)

Since we were new to software development, there were a lot of uncertainties in evolving requirements and potential technical challenges. We needed a methodology that could handle these uncertainties by maintaining low risks and allowing for continuous enhancement of the implemented features. The lecture on the Spiral model introduced us to a risk-driven process. Our priority was to implement the basic and key features and decided to focus on the quality of interface secondly. So, we ensured that the feature functions smoothly and then we enhance it in the later stages. The model's iterative approach allowed us to develop the project in small, manageable increments, making it easier to enhance features knowing the risks and make adjustments as needed.

Topic 2: Testing (LO7 18 – 21)

Testing the system on a small subset of inputs made it easier for us to evaluate each and every feature by building a testcase for every method, thus not missing out any feature. Integration testing allowed us to verify that different modules interacted correctly with each other. This exposed some errors that an individual testcase failed to prevent, like updating the parameters after a task.

What we believe that should be added to the lectures:

Aspect 1: Cybersecurity

One thing missing from our lectures was a focus on cybersecurity. It's important for software security to be taught, covering topics like threat modelling, secure coding practices, and how to find vulnerabilities. Given the increasing importance of secure software systems, integrating cybersecurity principles into our curriculum would be highly beneficial. Learning these would help us make safer applications.

Aspect 2: Data Management

Another thing we needed more lessons on was handling data well in our projects. It's important to learn how to design databases, organize data neatly, and move it around correctly. We spent a lot of time on implementing the database as it was a bit complicated. However, we proceeded with CSV files but now we feel that it would have been better if we implemented the SQL database. A little bit of introduction would have helped us make our databases work better and avoid problems with a large amount of data.