**IT5016**

**Assessment 2: Software Project Part B**

**Software Development Lifecycle (SDLC)**

* **Planning-**

In this first stage, we planned the main goal of the RequisitionSystem, which is to manage the requisitions for staff. We decided what the software should do, like collecting staff details, entering requisition items, calculating totals, and approving requests. We collected all the necessary data to ensure that the software would function as intended.  
  
In order to create the best solution, we must first fully comprehend the function of the software and what consumers require.

* **Design of System-**

We created the software's functionality during this phase. We determined how various system components (such as the approval process, requisition details, and staff information) would interact and function. To organize everything, for instance, we created a class called RequisitionSystem. We then constructed functions inside the class to handle various duties, such as gathering information and computing totals.  
  
Because it provides a defined plan and structure for the software's development, the design stage is essential.

* **Implementation-**

We began coding at this point. We took the design we came up with and made it into functional code. We created the class and methods that gather information (such as staff details and item prices), calculate totals, and manage the approval procedure. We ensured that the program accomplished all our design-phase goals.  
  
In this phase, we develop the real product that will address the issue that was noted during the planning phase.

* **Testing**

 After writing the code, we tested it to ensure that everything functions as it should. We experimented with various inputs to ensure that the system appropriately computed the total, authorized requests when they satisfied the requirements, and presented the data.

 Before the program is utilized by others, it must be tested to identify any problems or errors. It contributes to the system's accurate and dependable operation.

* **Deployment**

The software is now usable following testing. In this scenario, we would make the system available to the public, either for a particular employee or in a broader workplace. The software is now prepared for practical use.

Deployment allows users who require the software to access it. It guarantees that the solution is usable and available in the designated setting.

* **Maintenance**

Following deployment, we will keep an eye on the program and address any issues that may arise. Adding new features in response to user input or evolving requirements is another way we can enhance the system. Later, for instance, we might include the option to reject requisitions or take a different approach to handling huge requests. Upkeep guarantees that the program will continue to function properly over time and satisfy user requirements as circumstances evolve.

**Conclusion**Planning, Design, Development, Testing, Deployment, and Maintenance are the six phases that make up the RequisitionSystem's Software Development Lifecycle. These phases assisted us in developing a functional and dependable system that satisfies the specifications and has room for future development. We ensured that the program functions as expected and is working by following to this method.