5.1

Project Initiation: The first part of the project is the project planning which involves setting the boundaries of the project, its objectives and formulating the teams that will participate in the project. There is a formalization process that is associated with the project and comprises of the project charter along with the specifications regarding the expectations. The next activity after problem definition is requirements gathering; this involves interviewing stakeholders so as to have an idea of specified needs. Review and final presentation of functional specifications is made to incorporate final requirements.

The design stage is the stage where the architecture of the system and the system’s software, the database, and the interface are planned. All of the interfaces and dialogs for the student registration, supervisor dashboards, and appointment scheduling systems are both aesthetically pleasing and practical for use by the intended users. Password protection of the data is also mentined as are access restrictions to the data.

Then the development follows and this is not too hard to do since you are using Laravel to configure how the app is to do its back end work as well as how the interface and front end work is to be done. The user then completes the testing cycle to test whether the system can function correctly. They include functional testing and also performance and security testing.

Then comes Implementation after all the tests are done and the system’s suggestions are implemented. It does not hang on live servers of users and trained. The first official concern for support is set up to overcome the issues emerging at initial stages.

The next phase is Maintenance and Support where the system is expected to function as planned and free from any security breach of security. Whenever needed developments and enhancements are being done and some user support is always going on.

As for the effects of Documentation and Reporting it includes: It is maintained throughout. The manuals describe the user’s actions and processes within the system and are included in the documents. Project status is maintained through regular reports which are issued on a weekly basis.

Project Closure stage is when the deliverable end products/test results are evaluated and postmortem documents generated. The system is then passed on to the operational team who will take over the system’s upkeep and maintenance in future.

This model allows organizing the whole process of development by putting it in shape as a structure; therefore, the system that will be developed will be secure and reliable for its operation with the best performance that meets customer expectations.

5.2

The system starts with the registration of participants which includes personal information such as name, age, marital status, level of studies, abilities, skills, and interests about the research. The supervisors use institutional expertise and availability to choose their supervisory preferences. It also includes system configurations at the administrative level that dictates the roles and rights of users. These inputs are understood by the system and interpreted to match students to appropriate supervisors depending on their research interests and supervisors’ avialbility. For instance, students can search and find the supervisor in a particular research area and access their publication records with an integrated Google Scholar ID. Lecturers receive requests from students which they either deny or accept and allow the student to schedule an interview. Outputs include messaging supervisors and students about requests and this meeting appointment. In addition, the system also creates potential interactions between students and supervisors e. g. appointments and progress logs. The system is controlled by the administrators through a dashboard which is responsible for control of bickering, user account management and system configuration as well as resolving the problems raised by users. The system should effectively adhere to the data protection laws and ensure that the passwords are encrypted and storing the details of the user in a secure place cannot be accessible by unauthorized users. They perform such performance maintenance functions as supporting the system’s software execution and providing technical support for the system.