CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

Waterfall development methodology would be preferred for the development of an online food ordering system. This is a user interactive system that should be easy to use and free of bugs. The system should be tested at each phase of the cycle. In waterfall development methodology, testing is done after each stage of development. In this methodology, the previous phase of development should be complete in order to move on to the next stage. On the other hand, in agile process development, different steps of development can take place in parallel. In the agile process, we can move back towards the gathering of requirements even after the development phase while in waterfall methodology, we cannot move back after completion of one phase.

3.2 DEVELOPMENT LIFECYCLE METHODOLOGY USED IN PROJECT

SDLC is one of the most seasoned improvement approaches in data innovation. Although SDLC is one of the most established advancement systems, SDLC is still broadly utilized. SDLC is otherwise called waterfall demonstrate. This strategy has the accompanying fundamental structure:



The benefit of utilizing this methodology is anything but difficult to track. The SDLC or waterfall technique is separated into an unmistakable expression so it simple to return if there is issue occurred on the ebb and flow state. The documentation standard of this approach guarantees that the details are finished, and that they are imparted to framework advancement staff, the PC activity staff and the clients in the division. By isolating the improvement of a framework into various expressions, into more reasonable undertakings, alongside the strategies of correspondence offered this strategy have the open door for control of the advancement procedure.

3.3 JUSTIFICATION OF METHODOLOGY

There are so many reasons for preferring waterfall development technology over agile methodology, for the development of an online food ordering system. All stages of waterfall development methodology are predefined while on the other hand the agile process is segregated one and a large number of stages and steps of software development go hand in hand. Waterfall approach is structured one and every team member involved in the development and design of software is completely aware of all the stages of the development process. The agile process, on the other hand, is dynamic and abrupt changes may take place during the process of software development.

All requirements must be complete and clear before starting the development of a system using a waterfall approach. As an online food ordering system is not of the ambiguous type and all of its requirements are clear so, it is the best option to choose waterfall methodology. No rapid change is expected in the development of a system using a waterfall approach as all things and processes are previously planned defined. In this way, the waterfall approach is a better option as compared to agile development.

In waterfall methodology, all steps and processes are crystal clear and planned. Thus, the waterfall approach ensures that the system will be delivered on time. In this process, there is no repetition of any stage and process of software development.

In an agile process, change can be expected at any time so, the whole development team should be at the same physical location to deal and incorporate the change in the software system. On the other hand, there is no such limitation or restriction on the waterfall process. Waterfall process ensures the elimination of risks related to any kind of uncertainty in the system. Waterfall approach allows the allocation and distribution of work to developers sitting at remote places. It is a plan- driven approach and each stage of software development is properly documented. This makes the management process easy thus, dominating over agile development approach. Waterfall approach is easy to maintain.

Thus, considering all above- mentioned reasons it has become clear that waterfall development approach is best for the development of an online food ordering system.

3.4 HARDWARE AND SOFTWARE REQUIREMENTS

Hardware Requirement:

| 1. Hardware | | Pentium |
|------------------------|---|---------------------------|
| 2. Speed | : | 1.1 GHz |
| 3. RAM | : | 1GB |
| 4. Hard Disk | : | 20 GB |
| 5. Floppy Drive | : | 1.44 MB |
| 6. Keyboard | ÷ | Standard Windows Keyboard |
| 7. Mouse | : | Two or Three Button Mouse |
| 8. Monitor | : | SVGA |
| Software Requirements: | | |
| 1. Operating System | | Windows |
| 2. Technology | ÷ | РНР |
| 3. Web Technologies | : | Html, JavaScript, CSS |
| 4. IDE | : | Notepad++ |
| 5. Web Server | : | Wamp2.2e |
| 6. Database | : | My SQL |

User involvement

There are there users involve in the proposed system and they are:

- 1. Customers
- 2. Restaurant staff
- 3. Restaurant management

