**CHAPTER 4**

**METHODOLOGY**

**4.1 INTRODUCTION**

To choose the best methodology for our project we analyzed aspects like requirements, available time, human resources and financial requirements.

**We got the following results in our analysis:**

* The requirements of our project are pretty much clear and there are very little chances of any changes in them
* Our team was lacking experience and it was not capable of working in development of multiple phases in the same time.
* There are different modules in our project which required testing of them in their development phase.
* The progress in developing this project were required to be reported to our guide.
* We had very short time to get this project ready.

**Our analysis showed us that we should go with such software development methodology which has the following benefits:**

* Generates working software quickly and early during the software life cycle.
* More flexible – less costly to change scope and requirements.
* Easier to test and debug during a smaller iteration.
* Easier management of risk.
* Each iteration should be an easily managed milestone.

**Incremental Model** was best suitable for our needs so we decided to go with it.

**The following are the outcome of each release in the development lifecycle:**

**Server-Releases:**

**Release 1:** User management modules of server side were created and tested.

**Release 2:** Modules responsible for securely downloading a file in server were created and tested.

**Release 3:** The Compression module and Communication modules was created and tested.

**Release 4:** Enhancement in Handling request and response in communication modules were made.

**Client-side Releases:**

**Release 1:** GUI layouts and components of client-side application were created.

**Release 2:** Handlers were attached with their respective GUI components.

**Release 3:** Core libraries for functionality of client-side application were developed and tested.

**Release 4:** Handlers for different operation were created and tested.

**4.2 SYSTEM FLOW-CHART:**

**4.3 ALGORITHM**