infrastructure management

For Professor K. Chandrashekharan

# Report – 1

### Process Model:

The process model chosen for our project is Agile model. We have considered this model as it suits the closest for our requirements. We considered following criteria while deciding our model:

1. Unclear User Requirement
2. Familiar Technology
3. Low complexity of system
4. Reliability
5. Short time schedule
6. Cost limitation
7. Visibility of the customers
8. No component reusability required
9. No need for detailed planning
10. Flexibility for the developers
11. No need for extensive documentation

Considering all these factors of our project we made the analysis considering all the models available in a tabular form as below:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Factors** | **Waterfall** | **Spiral** | **Agile** | **Code-n-fix** | **Prototyping** | **Incremental** |
| Unclear User Requirements | 🗶 | ✓✓ | ✓✓ | 🗶 | ✓ | ✓ |
| Familiar Technology | ✓✓ | 🗶 | ✓✓ | ✓✓ | ✓ | 🗶 |
| Low system complexity | ✓ | 🗶 | ✓✓ | ✓✓ | 🗶 | ✓ |
| Reliability of system | ✓ | ✓✓ | ✓ | 🗶 | 🗶 | ✓ |
| Short time schedule | 🗶 | 🗶 | ✓✓ | ✓ | ✓ | ✓✓ |
| Cost  limitation | 🗶 | 🗶 | ✓✓ | 🗶 | 🗶 | ✓✓ |
| Visibility of customer | ✓ | ✓✓ | ✓✓ | ✓✓ | ✓✓ | ✓ |
| No component reusability | 🗶 | ✓✓ | ✓✓ | ✓ | ✓✓ | 🗶 |
| No need for detailed planning | 🗶 | 🗶 | ✓ | ✓✓ | ✓ | 🗶 |
| Flexibility for developers | ✓ | ✓ | ✓✓ | 🗶 | ✓ | ✓ |
| No need for documentation | 🗶 | ✓ | ✓ | ✓✓ | 🗶 | 🗶 |

\*Here symbols represent: 🗶 - Poor ✓ - OK ✓✓ - Excellent

From this table, we can observe that Agile process model best suits the project.

Under Agile process, we have Scrum and Extreme Programming methodologies. We will be following Extreme Programming framework as it provides the option of incorporating the changes requested by customer during the short development cycles. It also follows a strict priority order, so that we can work on Room booking module firstly. We were also interested in following some practices of XP like automated testing, pair programming, simple design, refactoring, and so on. Thus XP under Agile is our process model.