

Name: Avneet Sharma
Student ID: 202101104

Lab 1

1. Waterfall model

Explanation: It is a simple application with a minimal set of features.

2. Prototyping

Explanation: Since the end-user is a novice, we require a model which can be easily explained to them. If we choose prototyping, we can also add more features later to serve new requirements or discard the current prototype if the UI is too complicated.

3. Incremental model

Explanation: By using incremental model, we can use the current features and also add more features building upon the existing features.

4. Incremental model

Explanation: Since the requirements are constantly changing, it is the most suitable.

5. Incremental model

Explanation: Since the requirements are constantly changing and time-to-market is critical, it is the most suitable. Also, it is the model of choice for big projects.

6. Spiral model

Explanation: Being very comprehensive, it is the model of choice for applications where the risk of failure is high.

7. Incremental or synchronize and stabilize model

Explanation: Since the number of features is high, we cannot use waterfall model or prototyping. Also, since the spiral model is difficult to comprehend by non-technical end-users, there is no need to implement it as there is no risk as such at play.

8. Waterfall model

Explanation: It is a simple application with a minimal set of features.

9. Prototyping

Explanation: Since most of the end-users require a simple UI and there should be no risk as there are a large number of railway passengers, it is the most suitable model.

10. Spiral model

Explanation: Being very comprehensive, it is the model of choice for applications where the risk of failure is high.

11. Prototyping

Explanation: Since we do not want our new features to shut down previously working features, it is the model of choice.

12. Spiral model

Explanation: Since the end-user is extensively trained and we want to minimize error as much as possible, we don't need to implement less sophisticated models like waterfall, prototyping etc.

13. Waterfall model

Explanation: Waterfall model is well-suited for simple applications with minimal set of features.