SOFTWARE ENGINEERING LAB REPORT-2

PROJECT TITLE: CAR POOLING FOR IITI

PROJECT GROUP: G3

Team members:

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Software process model used to develop the project:

We had learned different models such as waterfall model, incremental delivery model, increment development model, integration and configuration model, timeboxing model, etc., during the class discussions. Among these models, we will be using the **incremental delivery** model for our project, a car-pooling application for IITI. We have planned and marked some of the main features and requirements which were mentioned in the previous report. Since there is a possibility of adding new functionalities and requirements, we are more driven to use the incremental delivery model.

Why the incremental delivery model:

- As all the requirements are not specified and only the main and important requirement analysis and definition is being done, we are more interested in using the incremental delivery model rather than a plan-driven model.
- It would be more beneficial to use an agile process such as an incremental delivery process model to meet the changing requirements and add new features once the process is started.
- The advantage of the incremental model is that the early increments can be used as a prototype to help elicit requirements for later increments. It reduces the risk of project failure
- Since we can check and experiment with the software model after each increment, it would be more helpful to use this model and amend the changes to that increment if needed.
- Since the development is divided into multiple increments, we have to freedom to prioritize the requirements in such a way that the highest priority requirements are included in the early stages of increments and also it reduces the cost of amending changes in the software.
- Developing the software in an incremental way also helps us to clarify the requirements for further system increments.
- The real difficulty arises when we are integrating all the increments. As new increments are completed, they are integrated with existing increments so that the system function improves with each delivered increment.
- Other parts of the system, which are difficult to specify in advance, should always be developed using an incremental approach.
- Since our project(car-pooling) is a kind of business system and a particular security encrypted system is not much needed, it would be better to use an incremental model to meet the changing requirements.

Some of the new features:

- We could add a feature called rapid ride which enables users to reach their destination in lesser time but with an increased price. This can be used for critical and emergency purposes.
- We could add a quick ride feature also for emergency purposes
- We could also add a daily ride feature with a reduced ride cost and with this feature we could also schedule the weekly, and monthly rides.

- We could also add a special ride feature in which we could add special riding instructions. For example, there must be special care taken when the rider is handicapped or carrying some delicate items, or the rider is pregnant.