



9 - PE SWE201c

Introduction to Software Engineering (FPT University)

Bài làm :

1. Two functional requirements of Administrative department are:

- They can book the trip basing on the plan, including airplane tickets, hotel, meeting room, and all of the services concerning the trip.
- They also cancel the booking in some urgent situations such as the weather, the decline from partners.

Four functional requirements of Managers are:

- They interact directly with the system, organize plan and modify the information of the trip.
- They are particularly concerned with assigning employees who take part in the trip (for business or for holiday travel), the duration, route, departure, and destination.
- They also view the cost calculation of the trips as well as the number of employees in charge, the number of locations that the trip go over.
- Managers can analyze and optimize the business travel process by using comprehensive reporting functions to generate predefined standard reports.

Two non-functional requirements of the system are:

- In travel expenses feature, all data is transferred during the trip and duplicate entries are removed.
- In travel planning, the search results are based on personal preferences and specific company policies.

2. Two user stories for Employees:

- As an employees, I want to give the request for absence in the trip that I am assigned so that I can inform the company about my absence in the trip to further handle my situation.
- As an employees, I want to view the calculation of cost in the trip so that I can see what things I have to pay and then I can consider if I can afford to book the trip.

3.

a. Requirements characteristics:

- Reliability: the requirements are clear, and this project is possible to run. The requirements are high reliable.
- types and number of requirements: the requirements contains both non-functional and functional requirements (list above), the requirements are clear and not ambiguous. They know user need, know solution because the list 5 key features of the system and they also know two types of user that may make use of the OBT system. They list more than 8 number of requirements including 6 functional requirements and 2 non-functional requirements.
- How often the requirements can change: Because they define requirements very well, and the IT team has experience and knowledge of business terms because in the context, it mentions : "The development team will be supported from the company to understand the terms of this business but rarely." so that the requirements can be describe as predictive and the requirements will not be change on a regular basis.

- Can the requirements be defined at an early stage: As I mentioned above, the requirements are expressed in great details, everything is fine and clear enough. The requirements are easy to understand, so that the requirements are defined at an early stage.

b. Development team:

- team size: the context mentioned above: “the team working on this project consists of 4 developers , 2 QAs and 1 Team leaders”. So, we can conclude that this project is average size not too big and the team size is not too big.
- level of understanding of user requirements by the developers: The IT team may understand enough of this project because they don’t need the company support to understand the terms of business regularly.

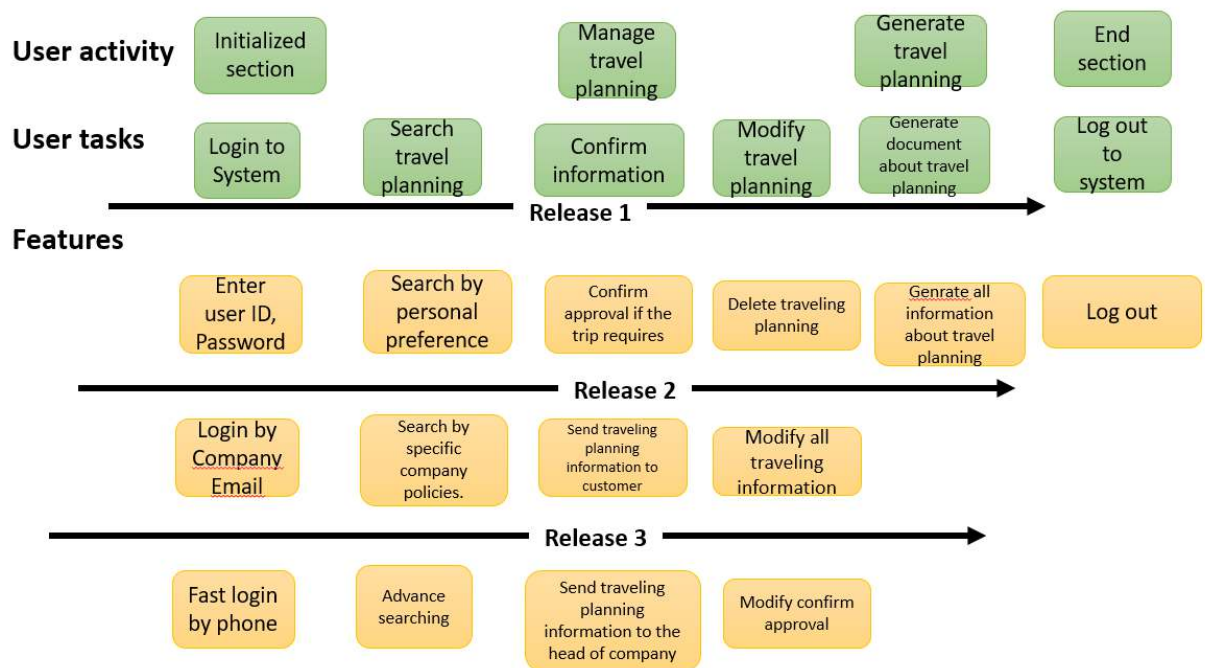
c. User involvement in the project:

- Small because the requirements are define very well and in the context they don’t mention about the user involvement in project to test the system or check if the IT team building this tool fit their requirements because as I mention above the requirements expressed in great detail.

To conclude, because the system is defined in 5 key features, so that we can build in parts.

If the company want this tool to be delivered earlier to use quickly, to get feedback, then apply necessary change for anther parts then they can use the Incremental Model for the most suitable software development model to build this Online Booking Tool.

4. A story map for the “Travel planning” feature:



## Advantages of Waterfall Model:

- It is one the easiest model to manage. Because of its nature, each phase has specific deliverables and a review process.
- It works well for smaller size projects where requirements are easily understandable.
- Faster delivery of the project
- Process and results are well documented.
- Easily adaptable method for shifting teams
- This project management methodology is beneficial to manage dependencies.

## Advantages of the Agile Model:

- It is focused client process. So, it makes sure that the client is continuously involved during every stage.
- Agile teams are extremely motivated and self-organized so it likely to provide a better result from the development projects.
- Agile software development method assures that quality of the development is maintained

- The process is completely based on the incremental progress. Therefore, the client and team know exactly what is complete and what is not. This reduces risk in the development process.