Agile Plan

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Agile Team

Product Owner

Transfers client needs into user stories, monitors progress of team, and updates clients on worked completed.
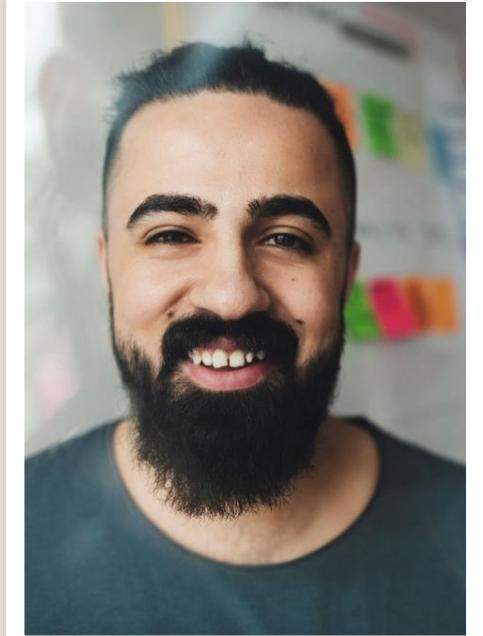
Scrum Master

Manages agile team members, collects daily status in scrum, addresses issues that the team may be having.

Developer

Specialized skill set to complete user stories, manages the actual execution of the picked user stories inside of sprint.
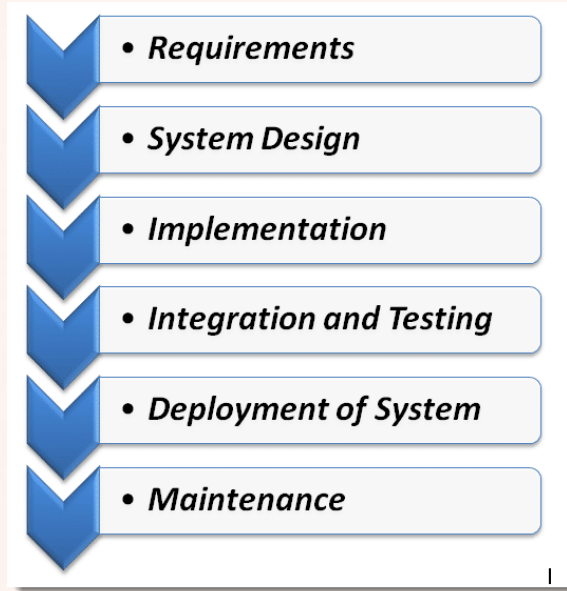
Tester

Develops test cases to determine if acceptance criteria is met and if a specific user story can be considered "done".

Phases of Software Development Life Cycle

1. **Requirement Gathering** – getting from client what is required.

2. **Requirement Analysis** – system requirements, evaluate alternatives, build user stories that are feasible

3. **Design** – application architecture, user interfaces, databases, system controls

4. **Development** – during sprint write the code

5. **Testing** – using test cases ensure that requirements are met.

6. **Implementation** – user stories put together and product ready for launch.

7. **Maintenance** – Keep system in running state, enhance system as needed, provide support for issues.

Waterfall Development Lifecycle

1. **Requirements**– Determined design and purpose of the final product.
2. **System Design**– system requirements, define overall system structure
3. **Implementation** – application is built in small units.
4. **Integration/Testing** – completed units are pieced together to make up program, software goes through rigorous testing looking for errors.
5. **Deployment** – application released to client.
6. **Maintenance** – Keep system in running state, enhance system as needed, provide support for issues.

One major difference is that when the client changed from list to slideshow view the entire system needed to stop. As once a waterfall has begun it is very difficult to change its trajectory. With the agile approach however, these changes were made seamlessly.

Use Agile or Use Waterfall?

Agile

- Complex and or Large Projects

- Clients should see progress during development

- Requirements are dynamic (the requirements will likely need to change during production)
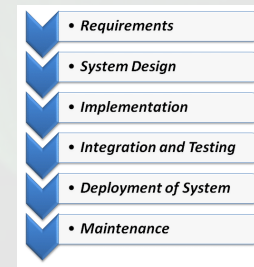
Waterfall

- Small or Uncomplicated Project

- Requirements are very clear and wont change.

References

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Charles G. Cobb. (2015). *The Project Manager's Guide to Mastering Agile : Principles and Practices for an Adaptive Approach*. Wiley.