Education Plan

Company 1 - TDDC88

Contents

Version	Author by	Updates	Reviewed by	Date
0.1	A. Nilsson & D. Ma	Initial version	E. Sköld	2021-09-17
0.2	D. Ma	Developed R&D and updated Communication to better reflect the current situation	E. Sköld	2021-10-13
0.3	E. Sköld	Updated the Quality part of P&S	D. Ma	2021-10-14
1.0	A. Nilsson	Updated P&S	D. Ma	2021-10-15
1.1	D. Ma	Added section 5	E. Sköld	2021-11-16

1   Introduction

This education plan is written with the purpose of clarifying what knowledge areas are important in order to succeed with the given assignment, what expertise is existent in the company from the onset, and what knowledge that has to be required. The education plan will also document what the company leadership has done in order to provide each member with the necessary knowledge. This document will be continually updated with input from the department managers and team leaders.

2   Communication

In our organization we are using a few tools to help us communicate between each other. The main tool is Microsoft Teams, where communication is handled in channels. The main channel is used for company wide information, meetings and also as the main place to store files, while smaller teams have their own channels where more specific information is shared. Everyone has access to every channel to make the information as transparent as possible.

For structuring our work we have been using Trello to create Kanban-boards. Tasks are put up on the list and people can either assign themselves or be assigned to a task to work on, which is a concept everyone is familiar with. No education is needed for these communication tools since everyone is already familiar with them.

In order to centralize the information and minimize the amount of tools used by the project members, it is decided in Iteration 1 that the Kanban-boards will be migrated from Trello to Gitlab.

3   Product & Sales

The Product & Sales department consists of three smaller groups of people with more focused work, which are the analysts, the testers and the quality assurance. Their education plan is described below.

3.1   Analysts

At the start of the project, the analysts will gather requirements about the product we will create. They will also make user stories and use cases to better explain what the product will do. To get the right knowledge about this, their education is based on what we learn in the lectures given in this course about these topics. The lab series in the course also has a lab regarding this topic, which will also be used to gain knowledge.

Continuous conversation with the customer and visits at the emergency departments will give the analyst team a clear idea of what the customer wants and how to best solve the problem at hand. These will be key for developing use cases and requirements. To develop the use cases, a workshop is held to make sure that every use case is developed in a pre-determined way. To do this a template for use cases is used during the workshop. After the requirements are developed, they are ranked based on how important they are to the product.

3.2   Testers

Testers are responsible to test the product to make sure it works as intended. They will start to learn about testing by studying the course material presented in lectures and labs to get a basic understanding about what their role is responsible for. The Karma framework for automated tests is chosen together with Selenium for testing the front-end of the application. The testers will perform self studies to get the required knowledge of these tools.

To get a good start with testing in the project a workshop is held where all the testers attend to synchronize their work and the tools that is going to be used. The different tools that are going to be used is set up so that all the testers has a working version and knows how to use it.

Karma and Jasmine was evaluated in the workshop to see which framework was going be best to use in the project.

3.3 Quality

Quality is responsible for ensuring that the product fulfills the quality standards we have put on it. The lecture material in the course regarding software life-cycle models and methods, software metrics, software reviews and software quality management is the foundation of the education within software quality. The laboration and lecture exercises with quality themes are also beneficial to the learning. Adding to this, walkthroughs and documentation of GitLab (quality) features are reviewed.

4 Research & Development

The Research & Development department is responsible for the development and programming of the product. This includes the configuration manager, architect, deployment manager, technical writer, UX designer and the developers.

4.1 General

At the beginning of the project the Research & Development department focuses on learning and working with prototyping. To get the members up to speed with the MEAN stack, the team leaders provides relevant links for each member to read up on. A document is also created where members can share useful links when doing their own research. In short, in the beginning responsibilites are placed upon each individual to study parts they feel in need to study.

In order to get the development started for everyone, not only the developers, the Architect holds a workshop with the goal of creating a functional development environment for each member of the project.

To provide a platform for technical questions and to foster a feeling of solidarity a channel exists (see Technical support and helpdesk in Teams). The activity in this channel provides an overview of the problems faced by the project members and will help management in educational purposes (e.g., scheduling workshops, providing helpful educational links, etc.).

4.2 Developers

Some of the team members had worked with the MEAN stack framework before, and thus it was chosen for this project. Decisions and justifications to why the framework is suitable for this project can be found in the Architecture Notebook.

Both the Architect and the UX designer have previous experience with the MEAN stack, and have the main responsibility of educating the project members when necessary.

4.3 UX Designer

The UX designers are responsible for the user experience (UX) of the application. The lead UX designer has a background in UX, user testing and Figma. The document "Länkar och Tips 2021" lays the foundation for the UX designers to work with and educate themselves with if needed. Additionally, with the lead UX designer's previous experience and self-education within the subject, she is able to quickly identify areas of risk and address them by further education or educating fellow UX designers.

To relieve the lead UX designer, the configuration manager has taken a secondary role as a UX designer, since the workload was too high in iteration 1. Additionally, management have decided to have a representative each from the analyst team and test team to report to the lead UX designer. This way the lead UX designer can share insights with both groups while the representatives also work as a sounding board.

4.4 GitLab

The Configuration manager, Deployment manager, and the Quality Coordinator are responsible for GitLab structuring and education. To educate themselves, they have studied the provided links about GitLab by the course examiner, amongst other sources. To spread what they've learnt, the information has been translated into guidelines listed in the Software Quality Assurance Plan and a Readme-file found in the root of the development project.

5 Educational events

In the following table, any educational event (e.g., workshops) within the company will be listed.

What	Date	Responsible	Description
Analyst workshop	24/9	S. Andersson	Walk-through of creating use cases and finish creating use cases.
Development workshop	28/9	J. Karlén	Setting up the development environment and how to get started with development.
Testing workshop	12/10	A. Telenius	Workshop to evaluate and discuss test tools.
GitLab workshop	3/11	A. Ambrosius & E. Sköld	Walk-through of guidelines and tools to use in GitLab. Focus points: requirements, labels, boards, workflow, commit messages and merge requests.