Project plan

Company 4

September 2021

Contents

1 Project Description

This document will give an overview of company 4´s continuous work with the software project in the course TDDC88 Software Engineering

1.1 Background to the project

In this project a website will be created towards Region Östergötland with supervision from several teachers. In the current situation personal at region Östergötland are using multiple systems to keep track of their organization at the emergency room. This leads to double documentation and runs the potential of having serious consequences since important data can be easily missed, or hard to retain from the current system. Currently there has not been implemented a software system at the emergency department that can display the most important information for the personal. Instead, they are using a combination of paper documentation in form of a paper emergency journal in combination with several separate software systems. The customer wants us to create product(website) that show the most important information needed at the emergency department in a hospital.

1.2 Relevant constraints

During the project our main constraint will be the time management. We will only be able to put in 160 hours /person into this project. Another relevant constraint that may affect our project is the possibility to get feedback from the customer. Constant feedback from the customer will be major factor, and since this is a side project for the customer, they may prioritize their time differently. The last identified constraint is the scope of the project. Since time is a scarce resource, implementing every function that the customer wishes for will not be possible.

1.3 Project Goal

The goal of the project is to create an organizational structure where we have the possibility to fulfill our customers needs.

1.4 Start and end date

The projected will be started during week 36 and ended during week 46.

2 Risk plan

The risk plan is used to identify and classify the risks within the project. The plan presents all the risks we have identified so far and also presents the action plan to minimize the inpact of these risks.

Risk classification	
Category	Risk factor
Critical	16-25
Major	9-15
Significant	4-8
Insignificant	1-3

No.	Risk	Plan
1.	Poor internal & external communication	Accept risk: Set up a **communication matrix** for external communication. Use **organizational mapping map** for internal communication aid.
2.	Lack of knowledge	Accept risk: Set up clear guidelines for how to educate team members. Use **guidelines** found under meeting CEO -> project plan -> project organization -> education- > education plan
3.	Project member leaves company	Make sure that we have good working environment. Work in **cross functional teams** & **distribute** tasks to minimize the consequence.
4.	Inefficient usage of time	Always have a clear **agenda** for large meetings. Meet in person when possible, for easier communication
5.	Unreasonable demands from customer	Have **constant** and **honest** communication with the customer.
6.	Conflict within the group	Lift potential **conflicts** early. Contact closest manager or the Line manager if help is needed.
7.	Uneven work distribution	Take personal responsibility of contacting manager in case of work overload/underload.
8.	Trouble implementing cross functional teams	Create and follow a clear organizational structure, that implements cross functional teams

Figure 1: Identified risks 1 - 8

9.	Missing important deadlines	Each manager and leader are responsible for adding deadlines to calendar document found in the General channel.
10.	Unclear responsibility	Clear communication within the group. Use our **scrum meetings** to clear up confusions.
11.	Sickness	Be flexible and work from home if needed. (Use teams)
12.	Functional demands are not met	To lower the risk of functional needs not being met these should be included in our **Kanban system**(Git). A **lecture** will also be held during week 39
13.	Trouble documenting personal contributions to group	Make sure to update the **time report** on a weekly basis. Alos keep track of your own tasks that have been performed and include these in your own individual report
14.	Version control trouble	Use Git. Also create **education plan** for usage of Git.
15.	Unrealistic user requirements	Pick and prioritize user requirements in **collaboration** with development team.
16.	Tests can't capture the issues	Create a clear **test plan**, and work in cross functional teams with development and testing.

Figure 2: Identified risks 9 - 16

No.	Risk	Plan
1.	Poor internal & external communication	Accept risk: Set up a **communication matrix** for external communication. Use **organizational mapping map** for internal communication aid.
2.	Lack of knowledge	Accept risk: Set up clear guidelines for how to educate team members. Use **guidelines** found under meeting CEO -> project plan -> project organization -> education- > education plan
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Figure 3: Action plan for identified risks 1 - 8

9.	Missing important deadlines	Each manager and leader are responsible for adding deadlines to calendar document found in the General channel.
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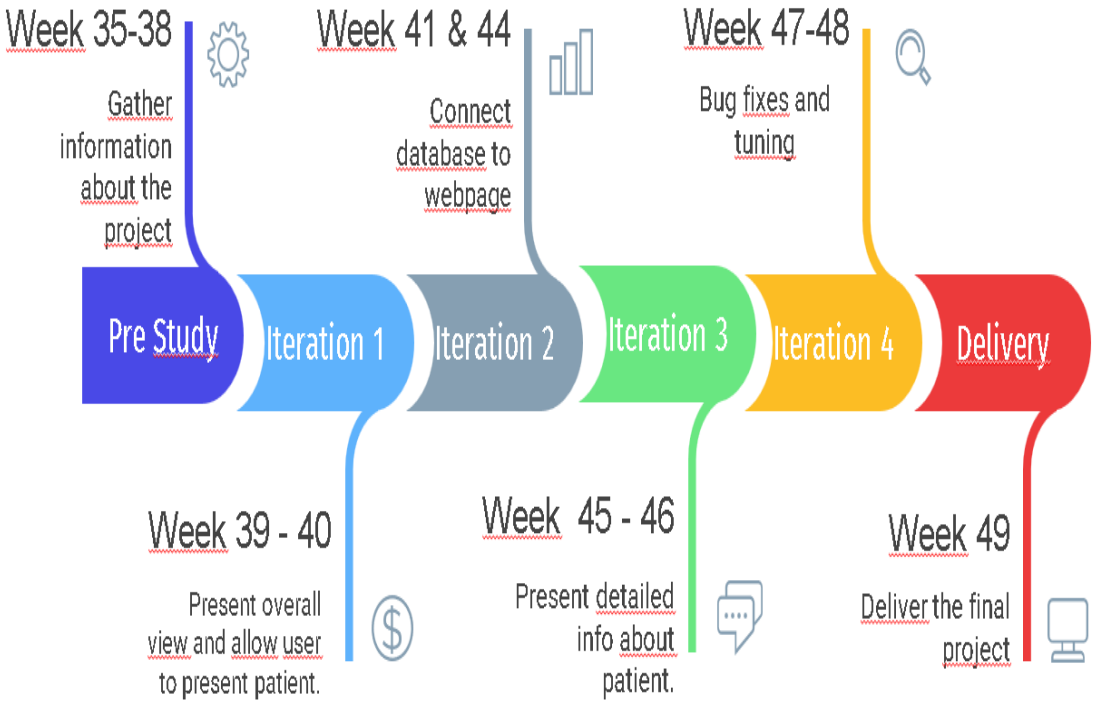
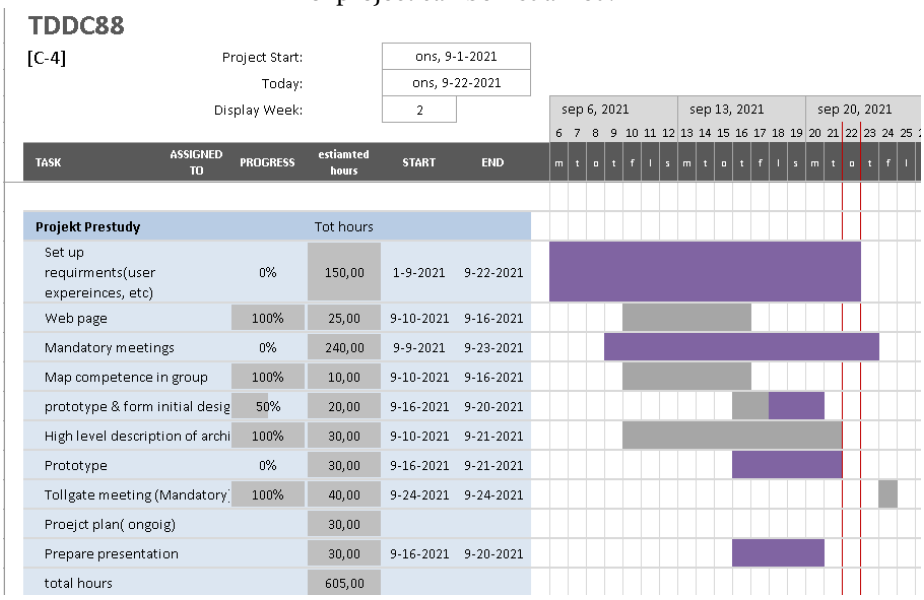
Figure 4: Action plan for identified risks 9 - 16

3 Timeline


Week 35-38
Gather information about the project
Week 41 & 44
Connect database to webpage
Week 47-48
Bug fixes and tuning
Pre Study
Iteration 1
Iteration 2
Iteration 3
Iteration 4
Delivery
Week 39 - 40
Present overall view and allow user to present patient.
Week 45 - 46
Present detailed info about patient.
Week 49
Deliver the final project

4 Timeplan

In the pictures below an estimation of the time and resources needed for each part of project can be visualized.



TDDC88

[C-4]

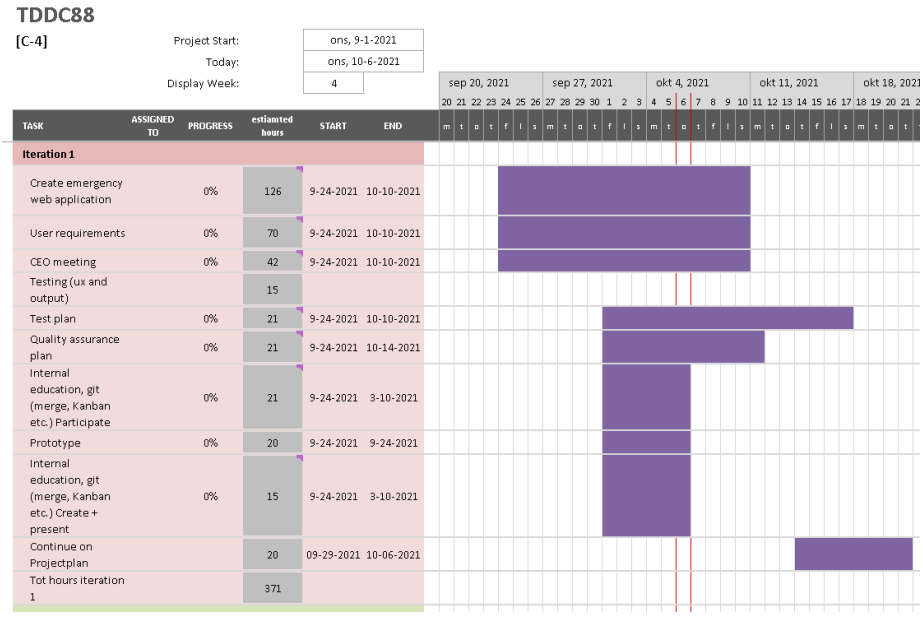
Project Start: ons, 9-1-2021

Today: ons, 9-22-2021

Display Week: 2

TASK	ASSIGNED TO	PROGRESS	estiamted hours	START	END
Projekt Prestudy			Tot hours		
Set up requirments(user expereinces, etc)		0%	150,00	1-9-2021	9-22-2021
Web page		100%	25,00	9-10-2021	9-16-2021
Mandatory meetings		0%	240,00	9-9-2021	9-23-2021
Map competence in group		100%	10,00	9-10-2021	9-16-2021
prototype & form initial desig		50%	20,00	9-16-2021	9-20-2021
High level description of archi		100%	30,00	9-10-2021	9-21-2021
Prototype		0%	30,00	9-16-2021	9-21-2021
Tollgate meeting (Mandatory		100%	40,00	9-24-2021	9-24-2021
Proejct plan(ongoig)			30,00		
Prepare presentation			30,00	9-16-2021	9-20-2021
total hours			605,00		

4.1 Iteration 1



TDDC88

[C-4]

Project Start: ons, 9-1-2021

Today: ons, 10-6-2021

Display Week: 4

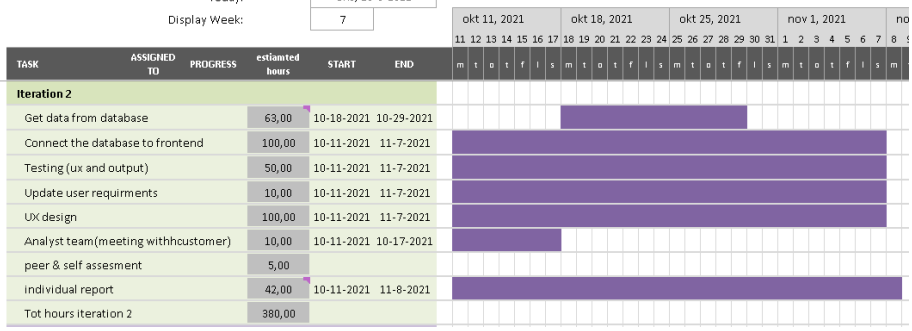
TASK	ASSIGNED TO	PROGRESS	estiamted hours	START	END
Iteration 1					
Create emergency web application		0%	126	9-24-2021	10-10-2021
User requirements		0%	70	9-24-2021	10-10-2021
CEO meeting		0%	42	9-24-2021	10-10-2021
Testing (ux and output)			15		
Test plan		0%	21	9-24-2021	10-10-2021
Quality assurance plan		0%	21	9-24-2021	10-14-2021
Internal education, git (merge, Kanban etc.) Participate		0%	21	9-24-2021	3-10-2021
Prototype		0%	20	9-24-2021	9-24-2021
Internal education, git (merge, Kanban etc.) Create + present		0%	15	9-24-2021	3-10-2021
Continue on Projectplan			20	09-29-2021	10-06-2021
Tot hours iteration 1			371		

4.2 Iteration 2

TDDC88

[C-4]

Project Start: ons, 9-1-2021
Today: ons, 10-6-2021
Display Week: 7



TASK	ASSIGNED TO	PROGRESS	estiamted hours	START	END
Iteration 2					
Get data from database			63,00	10-18-2021	10-29-2021
Connect the database to frontend			100,00	10-11-2021	11-7-2021
Testing (ux and output)			50,00	10-11-2021	11-7-2021
Update user requirments			10,00	10-11-2021	11-7-2021
UX design			100,00	10-11-2021	11-7-2021
Analyst team(meeting withhcustomer)			10,00	10-11-2021	10-17-2021
peer & self assesment			5,00		
individual report			42,00	10-11-2021	11-8-2021
Tot hours iteration 2			380,00		

After the first peer self assessment(October 18) the earlier work will be summarized and the total amount of hours spent during the project so far will be counted. After figuring out how many hours we have left as a group iteration 3 and 4 will be planned.

5 Project organization

This section will give an insight in how the company is structured and how we plan to implement cross functional teams within the company.

5.1 Cross-functional teams

In this section our cross functional team approach during the development of the product. The management layer will consist of Project Leader (PL), Process Manager (PM) and Line Manager(LM). Their responsibility will be to make sure that information flows throught the company, make strategic decisions regarding working hours and time schedule. The next level is Devolepment Team Managment which consists of Development Manager (DM) and Configuration Manager (CM). This layer's responsibility is to make sure that the version control system, GitLab, is used and maintained properly as well support the User Story teams in code and development matters. We will also have an Analyst & Architecture layer, which consists of an Architect (Arc) the lead analyst (LA) as well as three analysts (A). This group will support the User Story teams in requirement and architecture issues. There will also be a Back-end & Data team consisting of Two developers (Dev) and a tester. This team's main responsibility is to provide the data for the other teams in an efficient and structured way. There will also be two User Story teams, each consisting of two developers, a tester and a UX-designer. These teams will work with one User Story each, which will proceed the development process.

With this structure of the organization we will be able to access each team's knowledge in an efficient way. A visual representation of this structure is found in Figure 5.

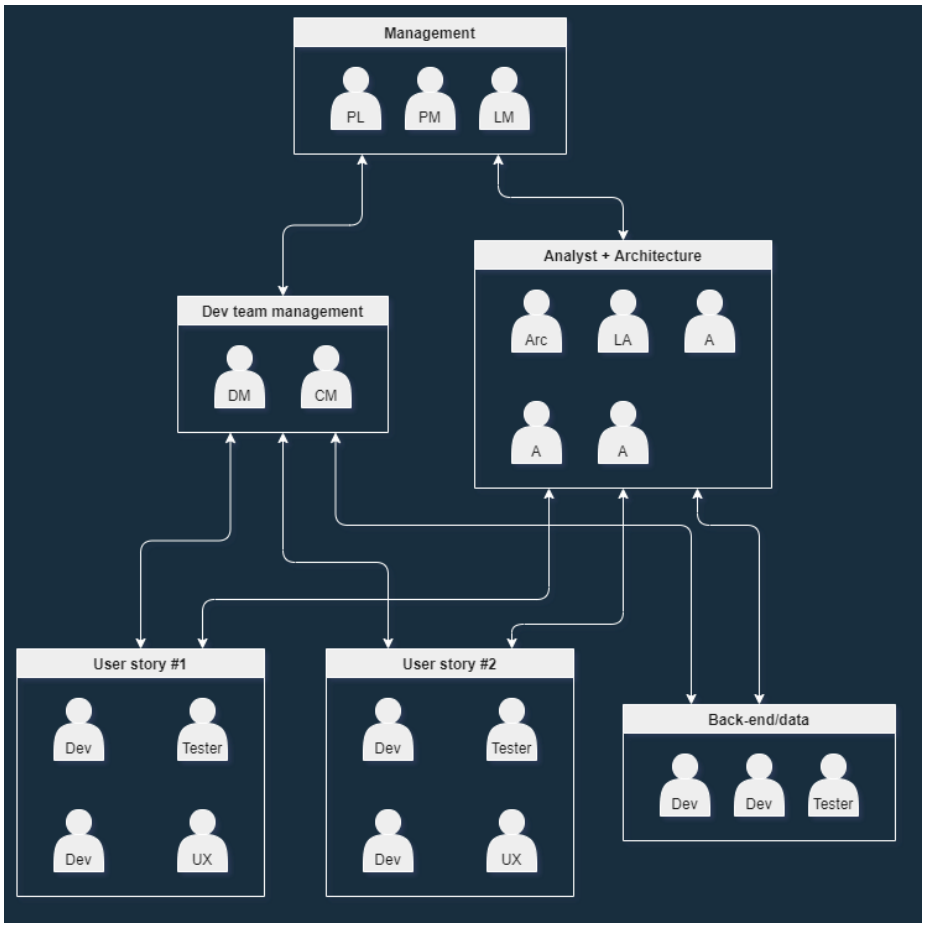


Figure 5: Cross functional teams

Roles	Appointed
Line manager	Viktor Storsved
Process manager	Marcus Alvebro
Project manager	Marcus Vidgren
Configuration manager	Martin Jonson
Product & Sales manager	Elin Linder
Lead Analyst	Beatrice Forsberg
Analyst	Elin Linder Gustav Gath Viktor Storsved
Data Scientist	Isak Berntsson Nikil Johny
Architect	Hugo Hallstensson
UX designer	Fredrik Olsson Marcus Alvebro
Research & Development Manager	Philip Nylén
Developer	David Råsberg John Palmqvist Nikil Johny Isak Berntsson Philip Löfgren Erik Jareman
Integrator	Erik Jareman
Test Leader	Gregor Öster
Tester	Elsa Salomonsson Lukas Lagerfors
Quality coordinator	Lukas Lagerfors Elsa Salomonsson
Deployment manager	Hugo Hallstensson Nikil Johny
Technical Writer	Victor Palmlund

Table 1: An overview of our internal education