Bern University of Applied Sciences | BFH

Department of Engineering and Information Technology

Bachelor's Thesis (Module) 20

Report on

"Planning of the Assignments for Lecturers(PLANA)" Web Application

Author: Kristina Shiryagina (kristina.shiryagina@bfh.ch)
Supervisor: Prof. Marcel Pfahrer (marcel.pfahrer@bfh.ch)
Expert:

July 28, 2020

Contents

Acknowledgements

Abstract

Introduction

Glossary

- **FURPS+eeles2005capturing** is a system for classifying requirements.
  - Functionality
  - Usability
  - Reliability
  - Performance
  - Supportability
- **SignalIR** is a free and open-source software library for Microsoft ASP.NET that allows server code to send asynchronous notifications to client-side web applications.
- **Blazor** is a free and open-source web framework that enables developers to create web apps using C# and HTML. It is being developed by Microsoft.
- **HTML** HyperText Markup language
- **CSS** Cascading Style Sheets
- **SQL** Structured Query Language
- **JS** JavaScript
- **CRUD** Create, read, update and delete
- **EF** Entity framework
- **UI** User Interface
- **API** Application Programming Interface
- **MS** Microsoft
- **BPMN** Business Process Model and Notation

Setup for Blazor

To use the Blazor framework it is necessary to install :

- **.NET Core SDK 3.1 or later** from `http://dotnet.microsoft.com/download`
- **Visual Studio 2019** from `https://visualstudio.microsoft.com/downloads/`

Work Plan

Effort Estimation

Project 2 is designed as a 4 ECTS module. This corresponds to a workload of 120 hours. When we are working on a project, we always record our hours of work in an Excel table. At the end of the project, we will compare this time with the time allotted for the project.

Scrum

The foundation of the project organization was Scrum. Some principles of Scrum could not be achieved since they need a group of more than two people. Our work was based on the principles of Scrum like the Empirical Process of Control, the core of Scrum, self-organization, value-based prioritization, etc. The Empirical Process of Control includes three main ideas, namely transparency, inspection, and adaptation.
Transparency: The work is carried out in full trust of all parties involved. Everyone has the courage to keep each other up to date with both good and bad news.
Inspection: Inspection is carried out by every one in the Scrum Team. The team openly shows the product at the end of each Sprint.
Adaptation: The team asks constant questions about the progress of work, whether we are on the right way. Depending on this, we can adapt an existing product.

At the beginning of the project, we have discussed and estimated all the work that needs to be done. Meetings between supervisor and developer are weekly and sometimes bi-weekly. Each meeting includes a discussion about what has been achieved since the tasks have been assigned, what can be improved, and scheduling of future tasks.

Scrum Roles

- Product Owner: Mr. Pfahrer
- Development Team: Shiryagina Kristina
- Scrum Master: Shiryagina Kristina

Scrum Plan

To discuss the project, were weekly and biweekly meetings held . They included personal meetings, and then meetings using Microsoft Teams. The meetings consisted of:

- Sprint Review. It includes a show of work and its discussion.
- Sprint Planning. It includes the scheduling of future tasks.
- Sprint Retrospective. It includes discussion about what went well and what went wrong, what we should do differently.

Scrum Artefacts

Sprints

The sprints covered a one week period. At the end of each sprint, there was a discussion with the supervisor.

In Table 11 is an overview of what was achieved in which sprint.

Sprint	Goals and Achievements
1	• • •
2	• • •
3	• • •
4	• • •
5	• • •

Table 1: Sprints

Sprint	Goals and Achievements
6	• • •
7	• • •
8	• • •
9	• • •
10	• • •
11	• • •

Table 2: Sprints

Sprint	Goals and Achievements
12	• • •
13	• • •
14	• • •
15	• • •
16	• • •
17	• • •

Table 3: Sprints

Conclusions and Future Work

Conclusions

Future Work

Protocol

Frequency: (weekly)
Meeting length: (60 minutes)

Agenda

- Demo and Discuss Deliverable(Demo)
- Planning next Goals(Plan)
- Lessons learned (Lessons)
- Date, time of the next meeting(next meeting)

Report from
Plan
Future goals are:

-
-

Lessons learned

Next Meeting: .....