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Project Description

Names of students:

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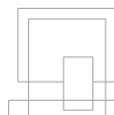Patrik Horný – 293112

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Supervisors:

Henrik Kronborg Pedersen

Joseph Chukwudi Okika

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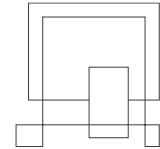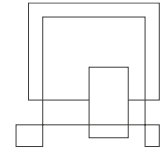
Software Technology Engineering

Semester 2

1 March 2019

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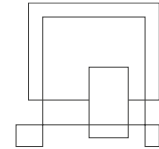VIA University College

Table of content

1 Background Description

Nowadays, when anything can be found on the internet, it is still not reliable source of information as libraries. This is mostly caused of easy misinformed information on the internet, because anyone with access to internet can publish a website. Also librarians are very important source of information, because they can help to recognize fake news from a real ones and guide customers to exactly what they want.

This project is concerning the development of a system for a library, where customers can reserve, borrow and check for books. There are two users in the system and those are librarians and library customers. For all users should be possible to log in with their nemID and password, so they don't need to register, and they can use the system directly. It is important for librarians to have access to customers accounts and be able to reserve or/and borrow books for them as sometimes the customer needs help.

The library system can interface with a database, which stores information about users but also all information about library items and all reserved and borrowed items from library. All information should be accessible by librarians. Customers should have access to all information about items in the library and information about their own account (as a borrowed item, reservations etc.) but they can't access information about other customers. It should be possible for customers and librarians to make a cancellation as well, as customer doesn't want to borrow item anymore.

Importance of library system is to improve reachability of library items for customers and improve information about library items for librarians. For libraries without a system is hard to find missing borrowed books from customers and this system should help them keep this information updated. It's important also for customers to have information about library items, which they borrowed, so they can be updated about upcoming deadlines for returning books. Also, they can see information about reservations, so they can check when the library item will be available.

2 Definition of Purpose

The purpose is to help library's customers reserve books and other items from the library, so that the librarians have an overview of availability of all books and items and to help efficiently manage the library.
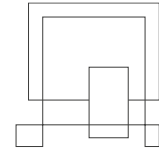
3 Problem Statement

The Library Management system is connected to the library network. When the user wants to reserve an item that seems available, he could wait for a couple of days. The reason is that library is connected to the library network which checks for the item in all the libraries in the current city. Then the reserved item needs to be delivered to the VIA Library which takes couple of days. There are several sub-questions connected to the main problem:

- How do we make the searching for particular items seamless for the user in a continuously expanding library?
- What kind of information should items in library contain, so it will be easier to find them?
- For how long should items be issued for the user?
- How should the reservation system inform the user if the book is available or not in the VIA Library?
- How many items can be issued to each user?

4 Delimitations

1. We will not send any notifications to customers via email, sms etc.
2. We will not include purchasing books and other items in our reservation system.
3. We will not make it possible to extend reservation time by customers
4. We will not add book requesting as part of the system (if the book is not present in the library, it will not be able to request the book to be added to library)
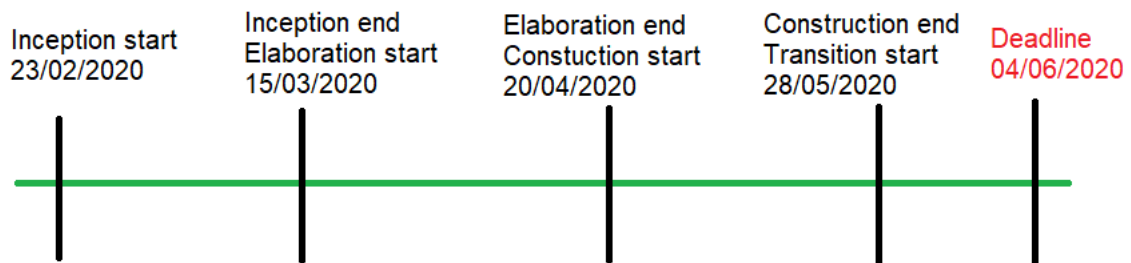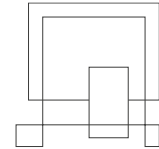
5 Methodology

The project will be controlled using the SCRUM framework.

New product owners and SCRUM masters will be chosen for each sprint. The product owner will set some requirements for a wish list to be done for each sprint, and will assess the result achieved at the end of the sprints. The SCRUM master will be responsible for enacting SCRUM features and practices during the sprints. A burndown chart will be managed by the SCRUM master for predicting when all of the work will be completed.

Each sprint has a fixed time-box of one week, where short daily SCRUM meetings will be held to check the team's progress. At the end of each sprint, a sprint review will be held where the product owner will inspect completed business value and establishes whether the sprint goal has been satisfied. Release retrospectives and heartbeat retrospectives will also be held. The release retrospectives are to reflect on the project and progress, where the product owner and the team are included. Potential bottlenecks and initiate repairs will also be discussed in the release retrospectives. Heartbeat retrospectives are held at the end of each sprint, where the team will reflect on the process, how the team is working and to initiate improvements.

6 Time Schedule

The time schedule is based on the phases from Unified Process and SCRUM will be used as a framework for controlling the project and each sprint will contain several of the Unified Process disciplines.
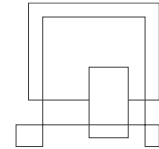
Inception phase is from 23/02/2020 to 15/03/2020, where the elaboration phase will start. The deadline for the elaboration and construction phases are estimated and cannot be defined until their previous phases end. The estimated deadline for the elaboration phase is 20/04/2020, where the construction phase will start. The construction phase is estimated to end at 28/05/2020, starting the transition phase. The transition phase will end at the deadline for the whole project, 04/06/2020.
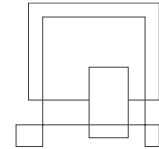
7   Risk Assessment

Risks	Description	Likelihood Scale: 1-5 5 = high risk	Severity: Scale: 1-5 5 = high risk	Risk mitigation e.g. Preventive & responsive actions	Identifiers	Responsible
Librarians will not use software	Librarians will not use software if it will be chaotic or if it will be too complicated	1	5	Testing of software and its design	Tester has to do lots of actions and cannot get wanted results quick	
Students will not	Students can ask	2	3	Testing of software	Students will not use	

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use software	librarians to do borrowing or reservation for them			and its design	software, instead they will ask librarians to do the reservations	
Server will crash or go down	Server will under some circumstances not communicate with client	1	5			
Customers will reserve a book, but will not pick up	Customers will not notice library about canceling reservation so everyone who also reserved this book	3	2	It is inevitable	There will be a big queue for reserved books	

8 Appendix

Group Contract

Group Name (optional):   Date: **12/2/2020**

These are the terms of group conduct and cooperation that we agree on as a team.

Participation: We agree to....

Actively participate in all the assignments and project works, which are assigned to us.

Communication: We agree to...

Honestly and openly communicate with each other without any prejudice. Inform other group members if something is not clear, so they could help us.

Meetings: We agree to....

Schedule frequent meetings and meet on discussed time. If a group member is not present, he is obligated to inform the other group members of his absence. If absent group members regularly miss meetings and decline to inform other group members, their dismissal from the group will be considered and discussed with the supervisor.
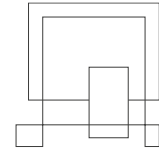
Conduct: We agree to....

Be on time, be active, and be prepared for the meetings. Listen to the others group members opinions and respect it.
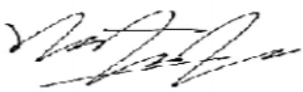
Conflict: We agree to....

Discuss about the conflict and try to reach a resolve, where all group members are satisfied. If the conflict cannot be contained, the group will discuss the matter with the supervisor.

Deadlines: We agree to....

Project Description (Group 8)

We agree put constant effort into the assignments and not start the assignments at the eleventh hour, so that we would not have to rush the assignments to meet he deadlines and hand in our assignments on time.

Group member's name	Student number	Signature
Karrtiigehyen Veerappa	293076	
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Patrik Horny	293112	
Tomas Soucek	293103	