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| **Riga Technical University**  **Riga Business School**  **Functional Specification Document**  **ProView Bauska** |

**DOCUMENT VERSION 1.1**

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**AUTHORS**

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**DOCUMENT HISTORY**

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| --- | --- | --- |
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| 23.10.2019. | 1.0 | First version of the document |
| 25.10.2019. | 1.1 | Minor improvements, mock-ups added |
| 07.11.2019. | 1.2 | Minor improvements based on instructor’s feedback |
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# Introduction

This document will address the issue of Bauska municipality. The municipality faces the problem of insufficient project and information flow. Municipality members see this issue as an inconvenient representation of projects on Bauska’s website. ProView Bauska aims to fill these gaps with their solution. This document will describe ProView Bauska solution’s functional design.

## Purpose of the document

The Functional Specification Document is a document that provides detailed information on *how* the system solution will function and the requested behavior. This document is created based on the request of First Year Seminar course instructors and provides traceability on the functional specifications back to the business requirements. Included in this document will be the detailed functional requirements including use cases, system inputs and outputs, process flows, diagrams, and mock-ups.

## Project Scope

Current solution will mainly affect the municipality’s project representation and project flow. Citizens of Bauska will have an opportunity to use our solutions; however, the main purpose is to satisfy the needs of the municipality.

## 1.4 Related documents

|  |  |  |
| --- | --- | --- |
| **Component** | **Name** | **Link** |
| Technical Design | ProView Bauska\_Technical Specification Document | <https://drive.google.com/file/d/12cPg8x0b5sOCLi7vcsLPuVuUzTYKcu40/view?usp=sharing> |

## 1.6 Risks and Assumptions

Team has a risk of failure in trying to satisfy the needs of the municipality. The main issue is to come up with improvements for the current system without the understanding of specific functions that make it uncomfortable to use.

The risk is to fail in trying to find the best solution for data representation (charts, diagrams, etc.).

There is a risk that our solution will not be integrated in the existing Bauska’s website because of technical differences.

The team assumes no responsibility for any risks or issues that are outside the team's technical knowledge or outside the control of the team.

# System/ Solution Overview

Project management system for Bauska municipality to easily access and process projects more efficiently. Includes accessing current and archived project information, deadlines, statistics and statuses. Solution aims to improve the municipality's project flow and potentially save time and money by ease of use.

## 2.2 System Actors

### 2.2.1 User Roles and Responsibilities / Authority Requirements

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| --- | --- | --- | --- | --- |
| **User/Role** | **Example** | **Frequency of Use** | **Security/Access, Features Used** | **Additional Notes** |
| Municipality’s project manager | Jolanta Kalinka | Frequent, every day or as often as necessary to keep the system up to date. | Full access to view and edit the database, including, but not limited to, project information and updates, project sections and categories. | Main person responsible for project data entries in the system. |
| System’s technical administrator | Vladislavs Jerins | Occasional, as often as necessary to ensure that the product is working properly. | Full access to view and edit the database, including, but not limited to, project information and updates, project sections and categories. | Main person responsible for functionality of the database and system. |
| Municipality deputy | Raitis Ābelnieks | Frequent, every day or as often as necessary to use data from the system for committee work purposes. | Restricted access - view, sort, and use information from entries. | Deputy who might use the information from the entries. Feature of editing the information has to be verified by system administrator in municipality. |
| Project sponsor | ELFLA | Several times during the project realisation period. | Restricted access - view, sort, and use information from entries. | Sponsors might use the information to verify that the budget of the project is used properly. |
| Citizen | Artūrs Kļava | Rare usage. | Restricted access - view, sort, and use information from entries. | Might use the information to stay aware of the situation in the city. However, one is not considered as a main user. |

**User Role Types**

|  |  |  |  |
| --- | --- | --- | --- |
| **User/Role** | **Frequency of Use** | **Security/Access, Features Used** | **Additional Notes** |
| Superuser | Frequent, every day or as often as necessary to keep the system up to date. | Full access to view and edit the database, including, but not limited to, project information and updates, project sections and categories. Accessible | Main person responsible for project data entries in the system. |
| Anonymous user | Frequent to rare | Restricted access - view, sort, and use information from entries. Accessible from the main page. | Municipality workers, citizens, sponsors |

## 2.3 Dependencies and Change Impacts

### 2.3.1 System Dependencies

Our solution will be implemented in existing Bauska’s website and/or new Bauska’s website, which is expected to be developed in the next year. Therefore, the solution must eventually follow prewritten technical rules of the new Bauska’s website to fully satisfy municipalities wishes and function properly.

Our solution depends on the right to publicize it on the existing website. If it is not allowed by the municipality, our solution will be implemented as an independent website to show its functionality. In such case it will function as an independent service providing additional information when redirecting from the official website.

### 2.3.2 Change Impacts

Our solution will mainly affect municipalities internal work because it will provide a better representation of data and improve data flow. As the main goal is the implementation of our solution on the existing website, it will affect Bauska’s existing website and might require to slightly adapt it, thus changing the project section entirely to our product.

In addition, for the ease of use of our product, the municipality might eventually have to change the way they store data about projects to make it machine-readable and more accessible.

# Functional Specifications

|  |  |  |
| --- | --- | --- |
| **ID** | **Functionality** | **Explanation** |
| 1 | Enter short project description | *Project database with short description, which displays the title of the project, section, project financer, status, project number(id), program/SAM, budget, purpose, planned activities, time period, coordinator* |
| 2 | Upload long project description | *Option to upload longer description in addition to short one, which could include more specific information in each section* |
| 3 | Enter project status | *Option to choose project status from: “Voting”, “Planning”, “Active”,“Archived”* |
| 4 | Filter projects “By status” | *Option to use checkboxes to mark criteria which determines results by status: “Voting”, “Planning”, “Active”,“Archived”* |
| 5 | Filter projects “By financer” | *Option to use checkboxes to mark criteria which determines results by financer (amount of options depends on project entries)* |
| 6 | Sort projects “By statuses” | *Option to use checkboxes to mark criteria which sorts results by statuses: “Recently updated first”, “Recent updated last”* |
| 7 | Sort projects “By budget” | *Option to use checkboxes to mark criteria which sorts results by budget: “Biggest first”, “Smallest first”* |
| 8 | Pie chart of budget | *Represent pie chart of all project budgets while the specific page of “Bauska’s Project Statistics” is opened* |
| 9 | Total amount of budget for all projects | *Represent the amount of EUR used in all projects* |
| 10 | Represent financing sources | *Use vertical bar charts to represent financing sources* |
| 11 | Represent project sections | *Use vertical bar charts to represent amount of projects in each section* |
| 12 | Choose year for statistics | *Option to use drop-down menu with past years to choose which one to represent on the project statistics page* |
| 13 | Choose way of presenting | *Option to use drop-down menu on the description and status page to choose how to present data (description or status accordingly)* |
| 14 | Project completion | *Horizontal completion bar which represents completion of the selected project between “Voting”, “Planning”, “Active”, “Completed”* |
| 15 | Update log | *Field with the records of project updates with dates and short titles* |
| 16 | Pie chart of specific budget | *Represent pie chart of chosen project’s budget (Spent vs Remaining) while the specific page of project is opened* |
| 17 | Pie chart of specific budget from overall budget | *Represent pie chart of chosen project’s budget (Project budget vs Overall budget) while the specific page of project is opened* |

## 3.1 Use cases

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| --- | --- |
| **UC-1** | **Project info editing / adding a new project** |
| **Primary Actor(s)** | Municipality’s project manager, system’s technical administrator |
| **Trigger** | Change in project’s description |
| **Main Success Scenario** | 1. Add/change project description 2. Save changes made 3. Delete project if necessary |
| **Extensions** | If unable to edit information, contact technical administrator |
| **Priority** | High |
| **Special Requirements** | Access to admin project editor panel |

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| **UC-1** | **Project status updating** |
| **Primary Actor(s)** | Municipality’s project manager, system’s technical administrator |
| **Trigger** | Change in project’s description |
| **Main Success Scenario** | 1. Write in the update log 2. Make changes to the spent budget 3. Save changes made |
| **Extensions** | If unable to update status, contact technical administrator |
| **Priority** | High |
| **Special Requirements** | Access to admin project editor panel |

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| **UC-1** | **Accessing project information** |
| **Primary Actor(s)** | Municipality’s deputy, citizen, project sponsor |
| **Trigger** | Need for information about projects |
| **Main Success Scenario** | 1. Search projects 2. Access wanted project 3. Read short description 4. See project updates 5. Download longer description |
| **Extensions** | If unable to access information, contact technical administrator |
| **Priority** | High |

# System Configurations

User side:

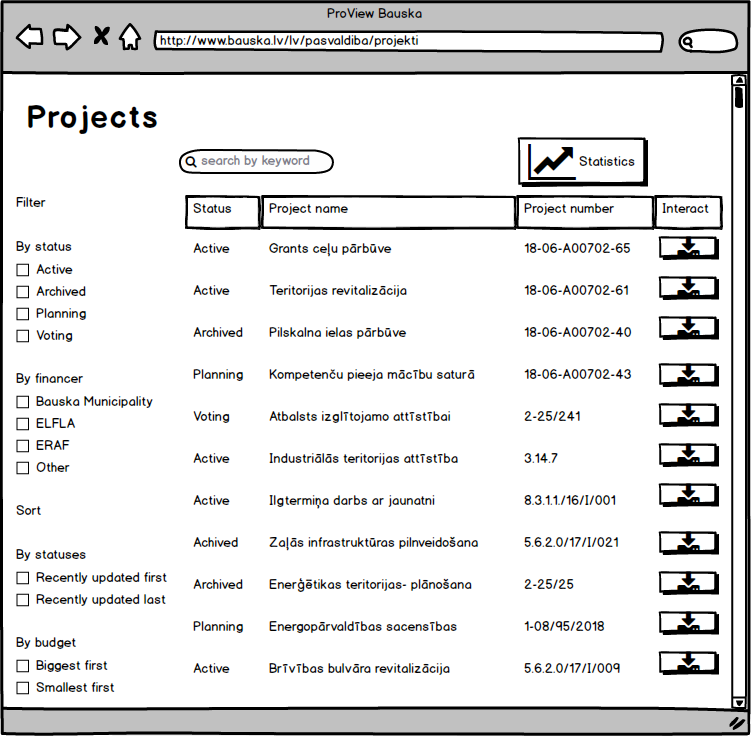
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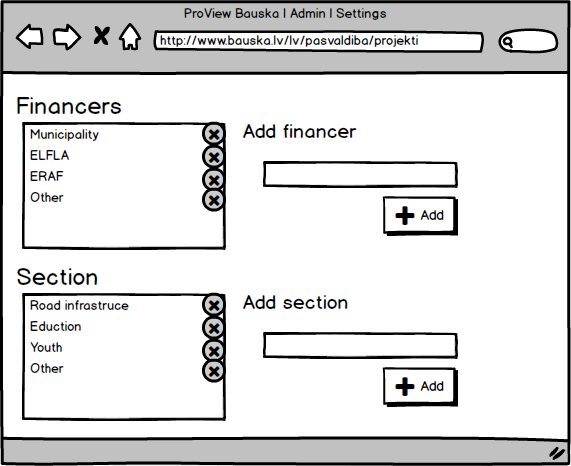
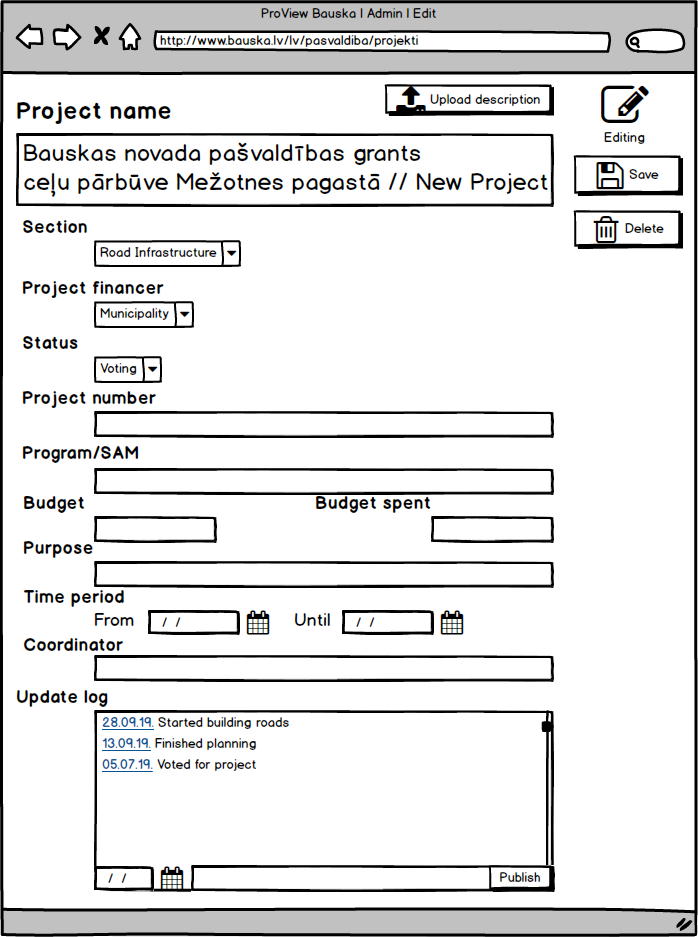
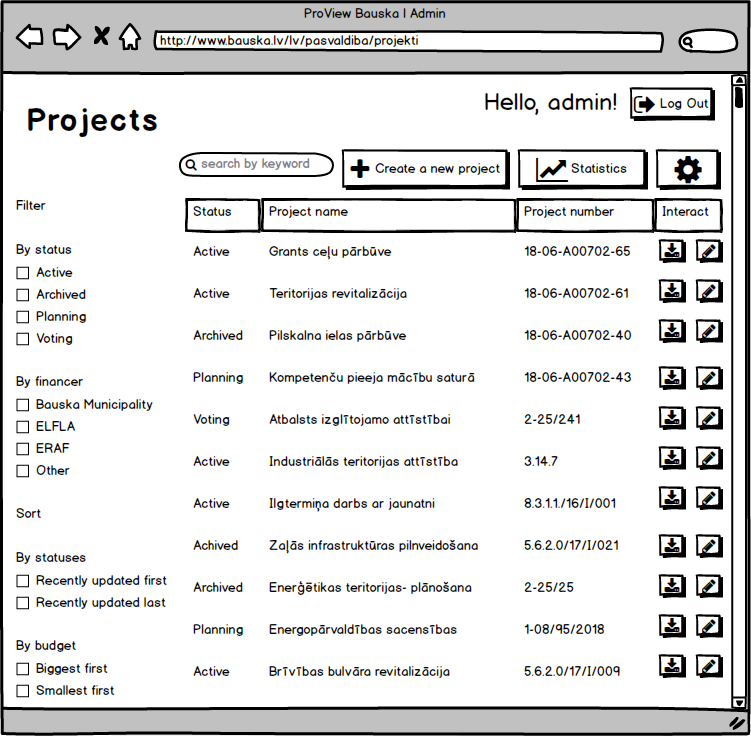
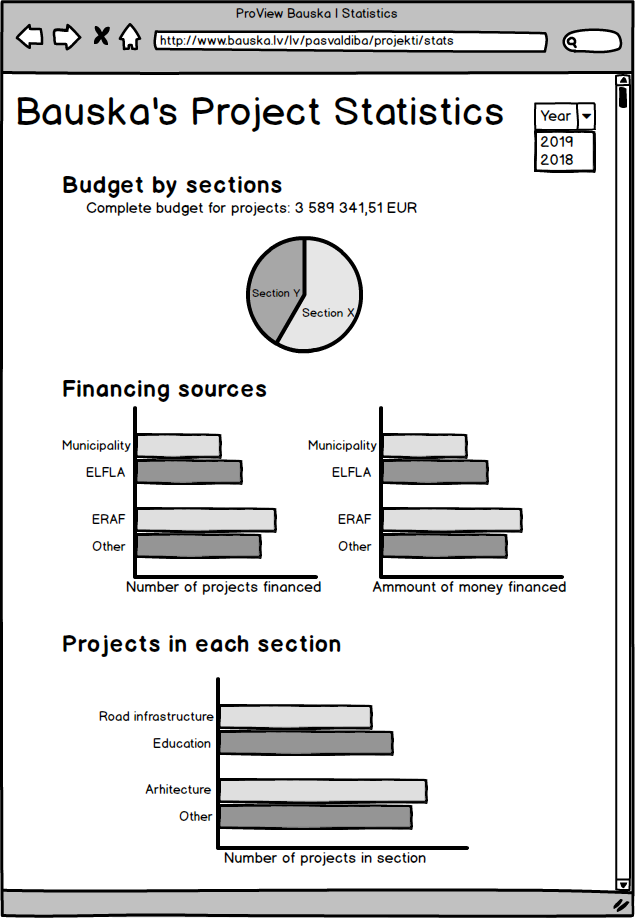
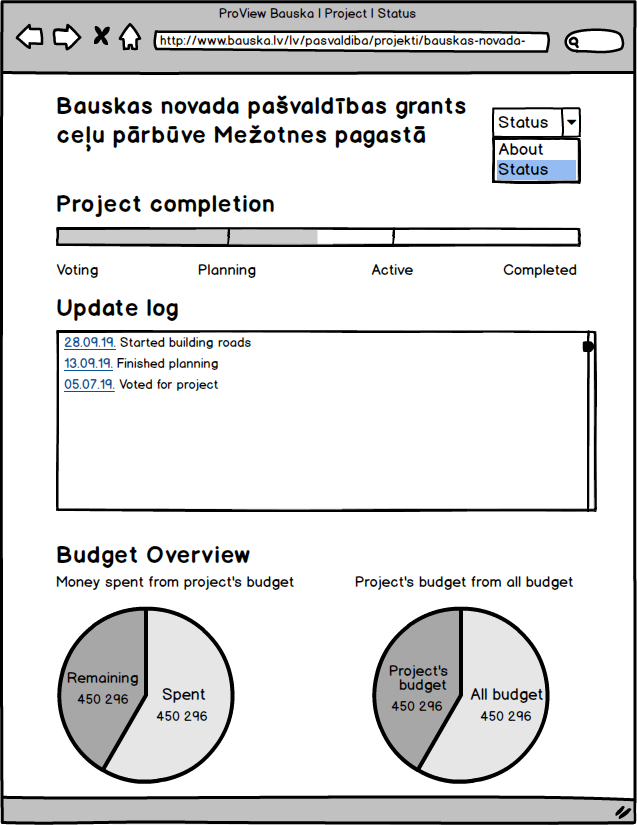
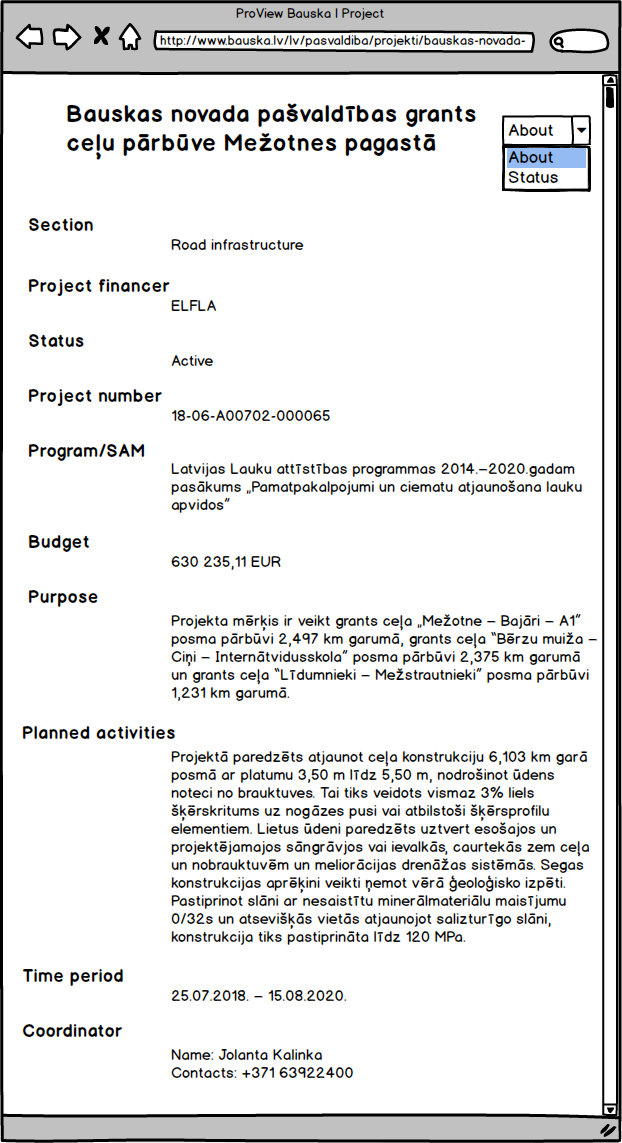
Server side:

(See Technical Design)

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### Mock-up

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