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| Assignment 1 | | Project Summary | |
| Course | | **Web Application & Service Development with Spring Framework v5** **- 2019** | |
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| Project author | | | |
| № | Pseudonym | | Face-to-face/ online |
| 1 | Instructor | | face-to-face |

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| Project name | Kanban Project management |

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| 1. Short project description (Business needs and system features) |
| The Kanban Project management tool allow to users to create project boards depending on their workflow and manage it to fulfil their goal with the help of Kanban.  Every board has two types of users – owners and members.  Owners are allowed to make changes to the board structure and invite different members to the board  Members are allowed to move tasks from one phase to another. |

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| 1. Main Use Cases / Scenarios | | |
| **Use case name** | **Brief Descriptions** | **Actors Involved** |
| * 1. **Login** | Registered user can log in to the system | Registered user |
| * 1. **Register** | *Anonymous User* can register in the system by providing a valid e-mail address, first and last name, and choosing password. | *Anonymous User* |
| * 1. **Create board** | *Registered user can create new board entering information about the phases of the workflow and the constraints for each phase.* | *Registered User* |
| * 1. **Invite people to board** | *Board Owner can add new users to the board filling their email and their role in the board (owner, member)* | *Board owner* |
| * 1. **Manage Board** | *Board owner can manage the phases of the board.* | *Board owner* |
| * 1. **Create Task** | *Board member can create new tasks in the border. After that they are put in the backlog. For the board* | *Board member* |
| * 1. **Move task** | *Board member can move task to another phase. System must check if all constraint are fulfilled.* | *Board member* |
| * 1. **See statistics for the board** | *Board member can see statistics for the board such as average time for moving from one phase to another, time from the start phase to end phase and so on.* | *Board member* |

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| 1. Main Views (Frontend) | | |
| **View name** | **Brief Descriptions** | **URI** |
| * 1. **Home** | Presents ability to register or log into the system. | / |
| **3.2. Login** | Presents ability to log into the system. | */login* |
| **3.3. Register** | Presents ability to register into the system. | */register* |
| **3.4. Boards** | Presents ability to manage (CRUD) boards. | */boards* |
| **3.5. Tasks** | Presents ability to manage (CRUD) Tasks of a board. | */boards/{boardId}/tasks* |
| **3.6. Users** | Presents ability to manage (CRUD) Users of a board | */boards/{boardId}/users* |
| **3.7. Statistic** | Presents ability to get a statistic for given board | */boards/{boardId}/stats* |

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| 1. API Resources (Node.js Backend) | | |
| **View name** | **Brief Descriptions** | **URI** |
| **Login** | Log in to the system | *POST /api/login* |
| **Register** | Register in the system | *POST /api/register* |
| **Create board** | Create new board and assign the current user to it as owner | *POST /api/boards* |
| **Get boards** | Get all the boards which the logged in user is part of | *GET /api/boards* |
| **Get board configuration** | Get configuration of a given board | *GET /api/boards/{boardId}* |
| **Edit board configuration** | Edit configuration of given board | *PUT /api/boards/{boardId}* |
| **Delete board** | Delete board | *DELETE /api/boards/{boardId}* |
| **Create new task** | Create new task in the board and put it in the backlog | *POST /api/boards/{boardId}tasks* |
| **Edit task** | Edit task - change data or move to another phase | *PUT /api/boards/{boardId}/tasks/{taskId}* |
| **Get all tasks** | Get all tasks for board separated by their phase | *GET /api/boards/{boardId}/tasks* |
| **Get task** | Get single task of the board | *GET /api/boards/{boardId}/tasks/{taskId}* |
| **Delete task** | Delete given task from the board | *DELETE /api/boards/{boardId}/tasks{taskId}* |
| **Get users** | Get users which are assigned to a board | *GET /api/boards/{boardId}/users* |
| **Add user to board** | Add existing user to a board | *POST /api/boards/{boardId}/users* |
| **Edit user access for board** | Edit access rights of a user for a board | *PUT /api/board/{boardId}/users/{userId}* |
| **Delete user from board** | Unassign user from board | DELETE /api/boards/{boardId}/users/{userId} |
| **Get statistics about board** | Get statistics for a given board | *GET /api/boards/{boardId}/stats* |