**Vision Document for “Scrum Management Tool”**

**Team members:**

*Munkhzorig Bayartsogt (610557)*

*Tuvshintur Batzorig (610561)*

*Davaabayar Battogtokh (610567)*

**1. Introduction**

2 years ago an IT startup project founded by 5 friends. They preferred to use Agile Development method Scrum, instead of traditional software development processes. Because, the agile method suits well with the team structure and project scope.

- Every morning they do “stand up” meeting where 3 main questions should be answered by every team members in ~1 minutes:

1. What have you completed since the last meeting?

2. What do you plan to complete by the next meeting?

3. What is getting in your way?

- They plan their work by every two weeks.

- They do retrospective meeting for every sprint closure.

Now the startup project is very successful and has got some investment from investors for expanding/leveraging the project to the public.

But their Scrum Management Tool is just Excel document and not comfortable with company expansion. So, they need to have a sophisticated Scrum Management Tool, in order to keep their success up to the future:

* The company develops multiple projects at the same time.
* Each project has less than 10 project members.
* An employee can be assigned to multiple projects.
* Employee can watch all the tasks of the projects where assigned.
* Every project has a Scrum Master.
* Scrum master plans, starts and ends Sprints which is iterative.
* Tasks should have effort points and it should be evaluated by Scrum Master.
* Tasks can be at one of the following states: “New”, “In progress”, “Done”, “Tested”, “Approved to deploy” and “Closed”.
* Task state changed by only responsible employees:
  + Assigned developer when task status between “New” to “Done”
  + Assigned Tester when the task is ready to be tested etc.
  + Scrum Master
* Not closed tasks in the end of current Sprints, should be replicated in Next sprint.
* Each Sprint duration is 2-3 weeks depending on the work and team.
* There is a backlog list for User Stories.
* At least one report at Project level(Effective Planning Report), Sprint level(Burn down chart) and Employee level(Effort burners by efforts burnt).

**2. Positioning**

**2.1 Problem Statement**

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| The problem of | Managing the software development process and allowing team members to track tasks. And allow project managers to assign tasks to team members and see team member’s workload. |
| Affects | Project managers, team members, customers |
| the impact of which is | Keeping track of each developers task is complex, must be maintained and changed frequently |
| a successful solution would be | One tool which builds a task manager that encourages team collaboration, transparency and efficiency among team members by  · Assigning task  · Alert overdue tasks to bring attention to it.  · Show each member’s workload and performance report  · Sprint burndown chart  · Show project overall performance  This tool will provide a Database and a user interface that is easy to use for software project manager and team members. |

**2.2 Product Position Statement**

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| --- | --- |
| For | Software development teams using agile method |
| Who | Scrum management tool to track project progress |
| The (product name) | TMS (Ticket Management System) |
| That | encouraging collaboration, transparency, and efficiency among team members. In fact, Scrum software can prove beneficial for almost any organization, as it facilitates communication, organizes workload, and helps members to plan for multiple iterations.  discuss their progress and bring up any issues that need attention |
| Unlike | Excel / Trello |
| Our product | Free reporting feature |

**3. Stakeholder Descriptions**

**3.1 Stakeholder Summary**

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| --- | --- | --- |
| **Name** | **Description** | **Responsibilities** |
| Scrum master | Every project has a Scrum Master.  Scrum master plans, starts and ends Sprints which is iterative. | -Create a project and set sprint duration  -Create backlog list  -Create sprints  -Assign task to member  -Archive task  -Manage task  -Evaluate effort points for the task  -Generate reports:  -Project level(Effective Planning Report),  -Sprint level(Burn down chart) and  -Employee level(Effort burners by efforts burnt). |
| Developer | Every task has assigned developer. | Assigned developer can change the status of the task.  Statuses are: new, progress, done.  Write comment on any task |
| Tester | Every task has a tester | Tester change status from done to approved.  Write comment on any task |

**3.2 User Environment**

We are involving people of software industries that have chosen Agile software development tool for the first time. Furthermore, Users can use our web application when they have internet access and smart devices such as PCs, smart phones, tablets etc. Now, they are using the Excel from Microsoft we will add import tool from excel to our application using Easymorph ETL which will be done in the early stage of the deployment.

**4. Product Overview**

**4.1 Product Perspective**

The product is independent and totally self-contained. Also we are planning with API module for the external systems.

**4.2 Assumptions and Dependencies**

1. Agile development process changes
2. User roles adds or removes

**4.3 Needs and Features**

**Scrum Master**

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| --- | --- | --- | --- | --- | --- |
| **No** | **Problem** | **Need** | **Priority** | **Features** | **Planned Release** |
| 1 | Company starts working on a new project | New project must be added to the system with its details: start date, due date, end date, name & description | High | Scrum master must have a functionality to add/remove a new project to SMT | v1 |
| 2 | Project has its own Sprints and members. | New project must have members, sprints, sprint duration and overall delivery score. | High | Scrum master must have a functionality to add/remove Sprint and Members to project | v1 |
| 3 | Sprint is a consist of tasks which is done by members. | Sprint must have tasks, retrospective meeting’s note. | High | Scrum master must have a functionality to add/remove tasks and retrospective note. | v1 |
| 4 | Task is an actual object for particular work | A task must have description, name, developer, tester, approver, deployer, effort point, activity log, tag(for the 3 questions?) | High | Scrum master must have a functionality to add tasks with proper field values to Sprints | v1 |
| 5 | Sprints must be completed once it started | Sprint must be able to be started manually and closed automatically | High | Scrum master must have a functionality to start a sprint after previous sprint closes. | v2 |
| 6 | Sprint must be evaluated | Live reports must be generated | Medium | There should be 3 reports:  Project level(Effective Planning Report), Sprint level(Burn down chart) and Employee level(Effort burners by efforts burnt). | v3 |
| 7 | User stories/requirements must be noted in Backlog list | Planning works should be placed in Back Log repository. Then, it will be able to be assigned to future sprint to be sorted out. | Low | Backlog repository for incoming user requirements or planned works | v3 |

**Tester**

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| --- | --- | --- | --- | --- | --- |
| **No** | **Problem** | **Need** | **Priority** | **Features** | **Planned Release** |
| 8 | Which backlog must have testing | The tester must attend a sprint planning meeting | High | Tester assigns himself as a tester. | v1 |
| 9 | Which testing is most important | contribute to the prioritizing process | High | Tester can prioritize tests | v1 |
| 10 | If testing cannot be complete in current sprint | He/she must bring backlog item that cannot complete in current sprint | High | The team prevent the sprint fail | v1 |
| 11 | Test automation |  | High | Testing process getting faster | v1 |

**Developer**

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| --- | --- | --- | --- | --- | --- |
| **No** | **Problem** | **Need** | **Priority** | **Features** | **Planned Release** |
| 12 | All tasks that are currently assigned to specific developer are not present. | Project manager can balance workload. | High | Scrum master can see all tasks assigned to each developer. | v1 |
| 13 | Spend time on not importand tasks. | Developer must be able to prioritize tasks, so that choose highly demanded taks first. | High | Task must have a priority. /Able to prioritize tasks. | v1 |
| 14 | Number of completed tasks cannot represent the amount of effort put into it. | Balance workload and evaluate team member’s efficiency. | High | Task must have an effort point. | v1 |
| 15 | Time spent on each task is not clear | Project manager must be able to evaluate team member’s efficiency as well as task difficulty. Check if estimated time allocated for each task is accurate, so that can improve planning in next tasks or next sprint. | High | Developer must be able to set or change the status of the task to mark start date and task completion date. It will be achieved through changing task status from “In progress” to “Done”. Status change log should be kept. | v1 |

**4.4 Alternatives and Competition**

Trello is an alternative solution for project management.

Pros:

1. Drag and drop
2. User friendly UX
3. Dynamic kanban gives flexibility for user

Cons:

1. Not dedicated for agile team
2. Too generic
3. Not able to sprint duration
4. Some required information for agile development task is not present in card

**5. Other Product Requirements**

1. Hardware requirements
   1. Recommended memory 4GB
   2. Recommended disk space 10GB
   3. Recommended OS Linux
   4. Strong internet connection
2. Platform requirements
   1. Java 1.8 or higher
   2. Nginx latest
   3. Mysql 5.7 or higher
   4. Web browser that supports ES6 or later

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| **Browser** | **Version** | **Date** |
| Chrome | 51 | May 2016 |
| Firefox | 54 | Jun 2017 |
| Edge | 14 | Aug 2016 |
| Safari | 10 | Sep 2016 |
| Opera | 38 | Jun 2016 |