

# Agile Development Assistant

Team number 15

Frosti Grétarsson (frg17@hi.is - 2607942549)

Guðmundur Óskar Halldórsson (goh12@hi.is - 0505952429)

Kristinn Þór Kristinsson (kthk8@hi.is - 0709892719)

**Presented by:** Sverrir Heiðar Davíðsson (shd4@hi.is - 0905972999)

## 1. Business requirements

### Vision statement

**For** developers **who** need to organize and track their progress and requirements through an agile development process. **The Agile Development Assistant is** an online software project planning tool **that** guides a team of users through the first steps of agile development; conceptualization of a project with user stories, extraction and outlining of features, and prioritization and time estimates of key features. **Unlike** the standard method of using whiteboards, paper and various online tools; **our product** unites the process in a single platform that bridges the gaps between each step presented in HBV401G(Þróun Hugbúnaðar)

### Business opportunity

Our goal is to offer developing teams better way to implement the first steps of the agile method in their planing work with an online software project planning tool. Helps teams to quickly create a scope for a new project or an "idea".

If we compare our platform to the more typical way of implementing the agile method where members of the development team work in their own "space" and then share work and updates regarding the project in meetings, where there might be a whiteboard containing the overall status of the project. Our product will make it possible for every team member to check on the projects status and update it whenever they want wherever they want. Everything is always at one place where it is easily accessible.

At first we developed this solution as a web application and is now coming to mobile platforms for a wider audience.

Our product is perfect for organized developing teams who are following the beginning stages of agile method and want to be more flexible. This could especially help a lot of new unestablished teams to quickly "build" an idea without too much initial commitment.

## 2. Scope and limitations

### Key use cases in brief format

#### 1. Create user story

A user opts into a project using a shared token for a project on the platform. When the system has validated the token the user navigates the app to where he can write a new user story. User shares the user story to the project where team members can now see it. The system sends the new user story to the server where it is validated. When validation succeeds the system brings the user back to view all user stories for project.

#### 2. Giving user story a planning poker estimate

The user opens the agile development system and logs into his project space. He then navigates to the planning poker estimation view. The user evaluates individual user stories and chooses the planning poker estimation he wants to associate with it along with a short comment explaining his reasoning. The system sends the data to the server and waits for processing. When done the system updates the data with the new contents.

#### 3. Finalizing planning poker estimation phase.

The user opens the agile development system and logs into his project space. He then navigates to the planning poker estimation view. After the user has given his estimates he proceeds to the end of the planning poker estimation phase. The system calls for the server to update the project. When server finalizes the system shows the user stories with their updated data.

### Limitations and exclusions

We decided to exclude certain parts that are taught as a part of agile development in HBV401G (Þróun Hugbúnaðar) to keep the project within our capacity. For starters we won't include any of the modeling features. Among those features are UML structure diagrams, behavior diagrams, object orientation, object oriented analysis (OOA) and design(OOD). We've also decided to exclude other features such as a project board, burndown chart, defining a framework for project schedule and iteration review. A lot of these features are very visual and would be too time consuming for us to implement during the semester. We've limited ourselves to the major features listed above, that is user stories, prioritization and planning poker.

# Product backlog

1. As a user I want to be able to create a new project for my team so that my team can access all relevant user stories in the same place.
2. As a user I want to be able to access my team's projects.
3. As a user I want to be able to exit a project I'm currently logged into.
4. As a developer, I want to be able create a new user story so that I can share it with my team.
5. As a developer, I want to be able to edit existing user stories so that when requirements change, I can adapt my team's user stories in line with the new requirements.
6. As a developer, I want to be able to delete an existing user story in case the requirements change and a user story is no longer relevant.
7. As a team member of a project I want to be able to initiate prioritization phase so that I can gather priority estimates from other team mates.
8. As a developer, I want to be able to initiate a planning poker phase for my team so that all team members can participate in the same phase of the project.
9. As a user I want to be able to give my user story estimations during planning poker phase.
10. As a user I want to be able to give my user story priority estimations during prioritization phase.
11. As a developer, I want to be able to add an explanation to my estimate so that I can explain my thought process behind that estimate.
12. As a developer, I want to be able to sort user stories by priority so that I can see which user story is most important.

Expected case is measured in **person days**.

User Story number	Best Case	Likely Case	Worst Case	Expected Case	Priority
1	5	7	12	7.5	100
2	1	2	3	2	90
3	1	1	2	1.2	80
4	2	3	4	3	70
5	1	2	3	2	60
6	1	2	3	2	60
7	2	4	6	4	30
8	2	3	4	3	30
9	2	3	4	3	20
10	2	3	4	3	20
11	1	3	4	2.8	20
12	1	1	2	1.2	10
Total	-	-	-	35	-

# Project Schedule

dates for sprints, milestones, assignments 2 and 3

Week - (from)	User Story	Estimated person days	Milestones	Deadlines	Sprints
W01 - 04/02	Design Model				1
W02 - 11/02	Design Model			Assignment 2 17/02	
W03 - 18/02	1,2,3	10.7	Create and log in to project		2
W04 - 25/02	4,5,6	7	Create, edit & delete user stories		
W05 - 04/03	7,8	7			3
W06 - 11/03	9,10	6			
W07 - 18/03	11,12	4	Functioning estimation/planning poker phases	Assignment 3 24/03	4
W08 - 25/03	<b>Buffer zone</b>				
W09 - 01/04	<b>Buffer zone</b>				5
W10 - 08/04	<b>Buffer zone</b>				
W11 - 15/04			Application Completed	Assignment 4 14/04	6

**Buffer zone** -> (Bug fixes, unfinished user stories & other unforeseen problems)