

Requirements and Analysis Document for HabitHets

Group 16:

Oscar Helgesson, Tina Samimian, Norbert Laszlo, Elin Nilsson,
Jacob Messinger

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1 Introduction

It all begins in the younger years when we start school and therefor also face our first academic challenge. As the years go, we are expected to take on more responsibility and suddenly, the only person we can rely on to make sure we get somewhere is no other than ourselves. There are some who have tried to solve the ongoing question about how to get our lives in order. Our application HabitHets might be the solution to the problem but without being forced to use several applications with different functions but the same goal. HabitHets is your friend. It helps you to collect your events, habits, notes and all of the other things you otherwise would try to keep in your head. With this one application you can structure and ease your life while it helps you to build your future habits at the same time.

1.1 Definitions, acronyms, and abbreviations

- **User Story** = A description of one or more features of a software system. Written from an end user's perspective.
- **Epic** = A large User Story responsible for a large endgame goal.
- **Habit** - A habit is a recurring activity such as "workout" or "brush teeth".
- **Todo** - A todo is a task that the user quickly want to write down. Such as "email Alex"
- **Note** - When the user has a random thought and quickly wants to write it down in the calendar. Such as "The sky was exquisitely pink today."

2 Requirements

In this section all the epics and User Stories for this project can be found. These have been guidelines as to what has been wanted to be implemented. And also what the final result of the project would be like.

2.1 Epic 1

As a user, I want to be able to add, remove and edit my habits on my calendar so that I can create new habits in life and reflect how well I preformed.

2.2 Epic 2

As a user, I easily want to be able to create todo-lists of checkable things I want to do, without them being attached to my calendar.

2.3 Epic 3

As a user, I want to be able to write down notes so that I can get my thoughts in my HabitHets.

2.4 Epic 4

As a user, I want to be able to add, remove and edit events so that I can structure my days and don't forget important activities.

2.5 Epic 5

As a user, I want to be able to see my day, week and month in my calendar so that I can get a overview of my life and see planed events.

2.6 Epic 6

As a user, I want to be able to change my preferences, such as color theme, so that my application fits my requests.

2.7 Epic 7

As a user, I want to be able to share my calendar and chosen events, habits and to-do's with friends to easier be able to know when we can hang out and also get inspired of each others lives and routines.

2.8 Implemented User Stories

ID USCAL1

As a user I want to be able to view an entire month to be able to plan further than just a week and to get an overview of the month.

Acceptance criteria

- Graphically portray a given month.
 - Display week numbers and dates.
 - Display days before and after the month to fill out the view and be able to know what days came before and after the given month.
-

ID USCAL2

As a user I want to be able to view a week forward, starting from any day of the week of my choosing, to be able to structure my day to day activities.

Acceptance criteria

- Show a week
 - Provide option to choose which day to start at, plus the six following days after that.
-

ID USCAL3

As a user, I want to be able to see what day and date it is in order to easily understand where I am in the calendar.

Acceptance criteria

- Show a graphical representation of a day.
 - Show the day of the week in close proximity to that day.
 - Also show the date of that day.
-

ID USCAL4

As a user i want to be able to see which day it currently is and other dates so i can plan ahead of time.

Acceptance criteria

- See the current date in the expanded day view.
 - See the current week in the week view.
-

ID USCAL5

I as a user want to see a horizontal line in the view that indicates what time of the day it is so I can see what events are upcoming and ongoing at a certain time.

Acceptance criteria

- Have a absolute horizontal line in the interface for the days in the expanded day view and in the week view.
- Have the horizontal line show what time of the day it is
- Have the horizontal lines' height get updated periodically and align to current time.

ID USCAL6

I as a user want to have a year view in my calendar so I can have a nice overview of the months in a year.

Acceptance criteria

- Have a dedicated view for the 12 months of a year show up (containing their days), given a year.
-

ID USCAL7

As a user, I want to be able to quickly and easily navigate back and forth between different days, weeks, months or years in order for me to more easily use the calendar.

Acceptance criteria

- Display an icon or label that shows what view the user is in
 - Show a label that states what day, week, month or year the user is viewing
 - Display two buttons that navigates the user back and forth when clicked, like example between months
-

ID USHAB1

As a user I want to be able to create and delete habits on my calendar so that I can have all the habits I want to.

Acceptance criteria

- Graphically portray created habits.
 - Be able to save habits.
 - Be able to delete habits.
-

ID USHAB2

As a user, I want to be able to see the streaks of my performed habits so that I can be motivated and continue to do my habits.

Acceptance criteria

- Display a view containing the habits.
 - Show streak for every habit.
 - Make sure streak is updated when the habit is done.
-

ID USHAB3

As a user, I want to be able to save a habit by pressing a button on the application so that I can don't lose my habits.

Acceptance criteria

- Be able to give input to a new habit.
 - Be able to press a button.
 - Save habit when button is pressed.
-

ID USHAB4

As a user, I want to be able to edit my habits on my calendar so that I can

update my habits as my everyday life constantly is changing.

Acceptance criteria

- Be able to give input to a habit.
 - Be able to press a button.
 - Save and update edited habit when button is pressed.
-

ID USNOT1

As a user I want to be able to write a note in order to quickly get my thoughts down on to HabitHets.

Acceptance criteria

- Provide a place from which a note may be entered.
 - Display written note.
-

ID USNOT2

As a user I want my notes to be placed in a specific day of the week to be able to swiftly view and put down any thoughts of my liking.

Acceptance criteria

- Graphically portray notes in the day-view.
 - Take input from user.
 - Save written notes for a later occurrence.
-

ID USTOD1

As a user I want to be able to add and remove a todo, so that I can be able to see what I need to do.

Acceptance criteria

- Add a todo.
 - Remove a todo.
 - Update an existing todo.
-

ID USTOD2

As a user I want to be able to save a todo in the GUI, so that I easily can see my todolist.

Acceptance criteria

- Graphically portray todos in the application.
 - Be able to write a new todo.
 - Be able to save a written todo.
-

ID USTOD3

As a user I want to be able to quickly add a todo in the GUI, to be remember my upcoming tasks.

Acceptance criteria

- Be able to press a button in order to create a todo.
- Be able to input the title.
- Save todo to the list of todos.

ID USEVE1

As a user, I want to be able to add events to my calendar and be able to see them so that I can better plan my time.

Acceptance criteria

- Display a button that can be pressed in order to create an event
 - Show the event on the right day and at the right time
-

ID USEVE2

As a user, I want to be able to edit and delete events from my calendar in order to update and manage my calendar.

Acceptance criteria

- Display a button that when pressed enables the user to delete events from their calendar
 - Display a button on each single event that when pressed deletes the event
 - Display a button on each event that makes the event enable for editing and another button to save what has been edited
-

2.9 Not implemented User Stories

ID USCAL8

As a user I want to switch views by clicking on a day, ie. when in month week, clicking on a date brings you to the expanded view for that day.

Acceptance criteria

- Be able to press a specific day(date).
 - When that day has been pressed, bring up the expanded view for that day.
-

ID USCAL9

As a user I want to be able to change my preferences and settings in order to customize the programme to my liking.

Acceptance criteria

- Create a setting page
 - Be able to change things eg. Theme of entire page and colour of events.
-

ID USCAL10

As a user I want to be able to share my calendar with my friends so we can schedule our lives together to be able to live happily ever after.

Acceptance criteria

- Create a share button.
- Be able to invite other people.
- Make other people be able to add events to the calendar.
- Make other people be able to add Todos to the Calendar.

- Make other people be able to add Notes to the Calendar.
 - Make other people be able to add Habits to the Calendar.
-

2.10 Definition of Done

The following items are the acceptance criteria that are common for all user stories.

- To be considered done, all User Storys should first be unit tested to a sufficient degree of satisfaction.
- The code should be reviewed by more than one developer independently to decrease the possibility of unexpected behaviour.
- The product owner, in this case our group, should all be acceptant of the US.

2.11 User interface

The application have three main parts, habits, calander and a todo list. These three parts will always be visible in the view.

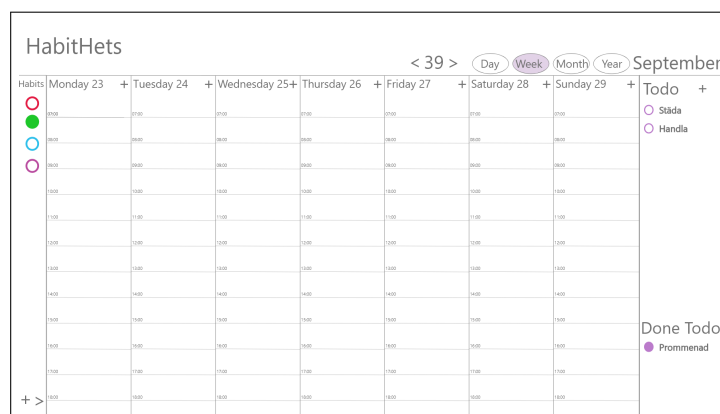


Figure 1: Front page of Habithets.

Figure 1 shows HabitHets front page. The center of the application is the main part of HabitsHets, the calendar. When opening the application the start page shows the current week, to give the user an overview of the upcoming events. The user can easily navigate between weeks by using the arrows in the header.

The user's habits are represented to the left of the application. There are round check-boxes that enables the user to confirm that a habit is done for the day. Each habit is given a color to easily help the user to recognize what habit it is, without having to get more information from the expanded habit-view. To get more information about the habits, the user have to press on:

>

On the right side of the application there is a todo-list that shows upcoming tasks. By pressing the +, a new Todo is created. When a Todo is finished, the user can easily mark the todo as done and it will then be moved to Done todos, where the last five accomplished todos are visible.

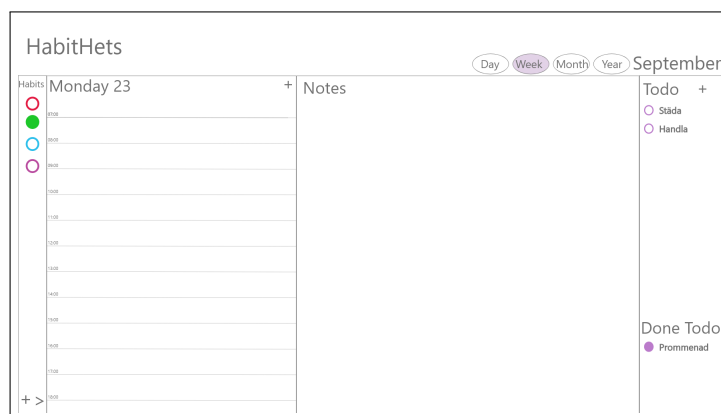


Figure 2: Habithets day view.

There are four different calendar views, day view, week view, month view and year view, and there are buttons in the header to change between the different views. The day view contains the events for that specific day and a notepad where the user can write down thing to remember.

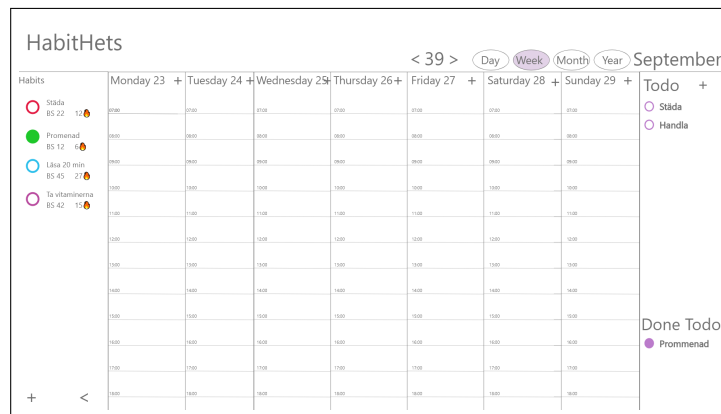


Figure 3: Extended view of habits.

When extending the habits view the user can see more information about the habits. Every habit has a title, a best streak and current streak. By showing the streak the user will get motivated to continue with the habit.

3 Domain model

This section includes our domain model and description of class responsibilities.

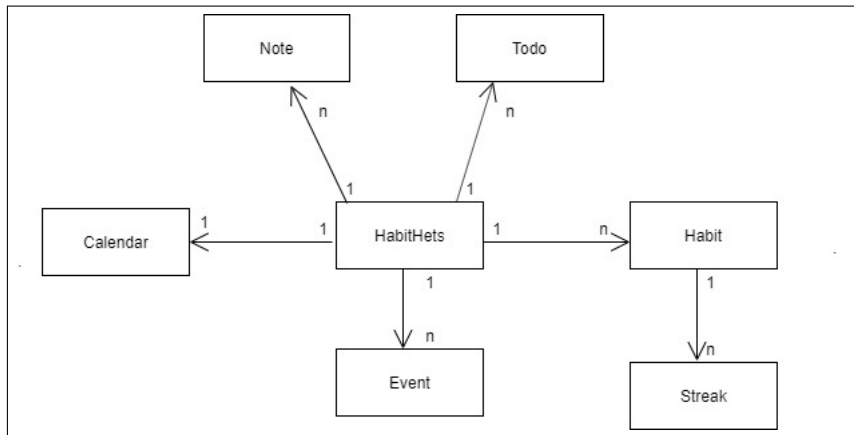


Figure 4: Domain model.

3.1 Class responsibilities

The entry point of the application is **Habithets**, which has the responsibility to connect all parts of Habithets.

Calendar will have all of the events and everything related to a day.

An **Event** is what the user add when an activity has a certain day and time it will occur on.

Every day will have a text-field connected to it to write down **notes**. These text-fields could be a tool for the user to quickly get down thoughts.

A **Todo** is an activity the user wants to do once, but still want to see and be reminded of. When the todo is done, the user can check the todo as done and see it in the "Done Todo" list. .

A **Habit** is, as the name reveals, a habit that the user has. The habits are not connected to the calendar and can be completed whenever they user wants them to be. Each habit can be assigned to a color so the user can connect the habit to it. This color enables the user to recognize each habit even when the habit view is collapsed. When the habit is complete, the user can easily document this by pressing the color and see a filled circle instead of an empty one.

Every **habit** will have a streak connected to it. The streak tells the user

how many days in a row the habit has been completed. The user is also able to see the best streak each habit has.