

Requirements and Analysis Document for

TDA367

Group 11

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1 Introduction

If one lives in a household with multiple people it can be hard to know if everyone is assisting with the chores. A person with multiple roommates or a mom that wants the teenage children to be more involved with the household chores would benefit from TidyAPP. Thanks to the application TidyAPP chores can be an exciting competition that all household members can take part in.

This application is created for multiple people households that wants to make chores a fun part of life. You collect points by performing chores from the list the household has created. Creating a chore is easy. You give the chore a title, a description, and the amount of points it is worth performing. When the chore is accomplished, the points are collected.

Instead of having to force other household members to assist with chores TidyAPP makes people want to do chores because of the experience of competing against those you live with. It can help people that normally does not perform chores well to do a better job just to win the competition. TidyAPP can really change the work ethic of different household members and give everyone a more fun reason to do chores other than just to keep the house clean.

1.1 Definitions, acronyms, and abbreviations

- MVVM: Model-View-Viewmodel

2 Requirements

2.1 User Stories

- Priority 1

- User story

The user story is implemented

Story Identifier: STK001

Story Name: Add chores

Description

As a household member I want to be able to add chores so that I can update the chores whenever there is more to do.

Functional

- Can I add a chore?

- Can I name a chore?

- Can I decide how many points a chore is worth?

- If I click add chore is main page updated?

Non-functional

Availability:

- Can I add chores at any time (24 hours per day or 24/7/365)?

- User story

The user story is implemented

Story Identifier: STK002

Story Name: Create profile

Description

As a person who wants to be a household member of TidyAPP I want to be able to create a profile so that I can participate in the competitions.

Functional

- If I click "add profil" and type in my name in "add name"-textfield is a profile created?

- User story

Story Identifier: STK003

Story Name: See leaderboard

Description

As a household member, I need to see a leaderboard to get motivated

to do my chores, keep track of my family members and see how many chores I need to do in order to win the competition.

Functional

- Can I see other household members scores when they are in the top three highest scores, including my own?
- Can I see the household members scores in accordance with the amount of points they have?
- If I click on the leaderboard icon the leaderboard is updated?

– User story

The user story is implemented

Story Identifier: STK004

Story Name: Chores on Main page

Description

As a nontechnical household member I need to have a good overview on what chores that needs to be done, so I know what to do.

Functional

- Can I view chores from the main page?
- If I click add chore is main page updated with the new chore?
- If i click chore completed is main page updated without the completed chore?

– User story

The user story is implemented

Story Identifier: STK005

Story Name: Create account

Description

As an admin i need to be able to create a household account so that i can create profiles for the individual household members.

Functional

- Can I create a household-account?
- Can I create household member profiles in the household-account?

– User story

The user story is implemented

Story Identifier: STK010

Story Name: Chore history

Description

As a forgetful person, I want to be able to see what tasks I have completed during the competition so that i can remind myself.

Functional

- Can I see history of previously performed tasks during the round.

– User story

The user story is implemented

Story Identifier: STK012

Story Name: Switch households

Description

As a member of many households I want to be able to switch between different households in order to help with chores in different families

Functional

- Can I be a member of more than one household?
- Can I switch between household on the app?

• Priority 2:

– User story

Story Identifier: STK006

Story Name: Game round reset

Description

As a member of a household I want to be able to play the game in rounds so that my score resets every now and then and I get a new even playing field.

Functional

- Does the points of the household-members reset every game round?
- Is the leader board is updated with the new results instantaneously at new game round?
- Is a winner pronounced before the reset of the scores?

– User story

Story Identifier: STK007

Story Name: Chore time frame

Description

As a structured person, I want to be able to see the time frame I

have to complete a task so i can plan my everyday life

Functional

- Can the time frame a task has be seen on the chore card?
- Does the chore disappear when the time is up?

– User story

Story Identifier: STK008

Story Name: Chore deadline

Description

As a member of a household I want to be able to add deadlines to chores in order to create urgency for chores that need to be done within a certain time frame

Functional

- Can I assign a deadline to new tasks which dictate how soon the task needs to be done?
- Can I see how much time a task has left by looking at its card?

– User story

Story Identifier: STK009

Story Name: Limited chores

Description

As a household member I want to regulate who can do what chores so that only some chores are visible to some profiles

Functional

- Can I tag other household members on a specific chore I create?
- Is the newly created chore only available to the household-members that are tagged?

– User story

Story Identifier: STK011

Story Name: Edit chores

Description

As a member of a household I want to be able to edit chores so that I can change the value of a chore when it is already created.

Functional

- Can I edit a chore that is already created? - If I edit a chore does it update when saved?

- Priority 3:

- User story

- Story Identifier: STK013

- Story Name: Accepting chores

- Description

- As a member of a household I want to be able to create a chore that everyone in the household has to accept so that everyone is happy.

- Functional

- If I create chore does all household members have to accept the new chore?

2.2 Definition of Done

The common acceptance criteria for all user stories is that all tasks are done and the code is tested.

2.3 User interface

The figure 1 shows the first page of the application. The user can either chose between login or register a new household which is shown in figure 2 and 3.



Figure 1: Picture on the first page

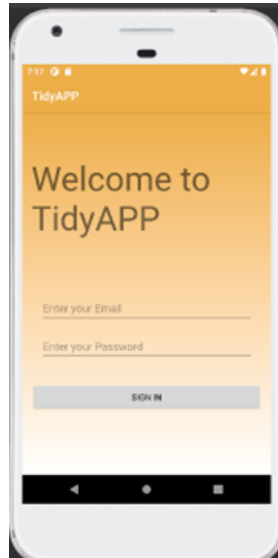


Figure 2: Picture on the Login page

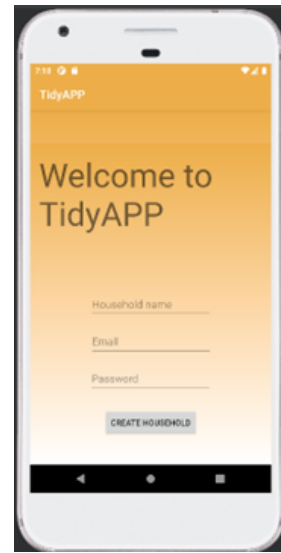
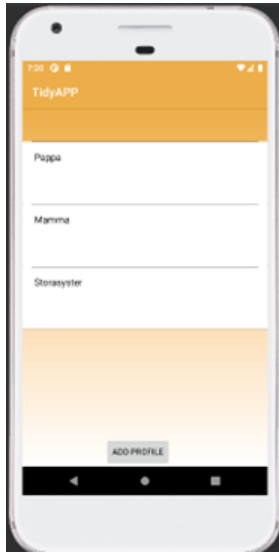
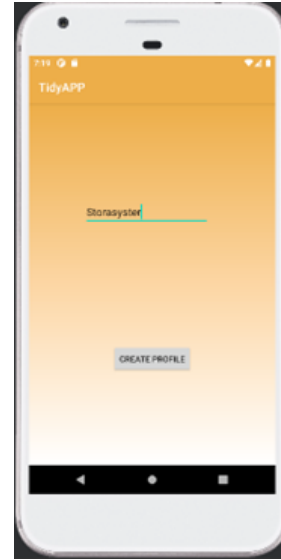


Figure 3: Picture on the registration page

When the household is signed in the next step is to choose a profile which is shown in figure 4. The user can also choose to create a new profile, see figure 5.



Figur 4: Picture on the Profile page

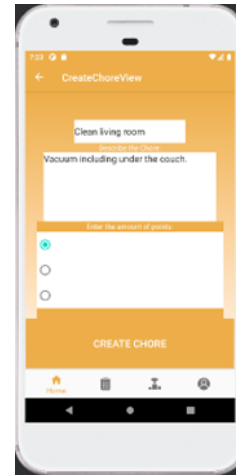


Figur 5: Picture on the create profile page

When the profile is clicked the home page in the application will be shown, see figure 6. There is a navigation bar in the bottom of the page which switches the application views. The home page shows the households chore that needs to be done. Every profile can create chores that will be added to the households chores. To add a chore, click on the "create new chorebutton and the create chore page will show up, see figure 7.

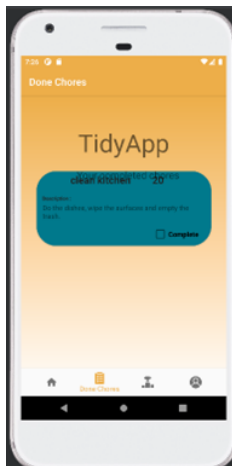


Figur 6: Picture on the home page

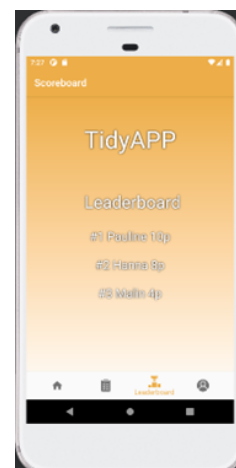


Figur 7: Picture on the create chore page

If the user clicks on the checkbox on the chore it will move to the users done chores and the profile will gain the points of the chore, see figure 8. The leaderboard will show up if the user clicks on the leader board button on the navigation bar, see figure 9.



Figur 8: Picture on the Done chores page



Figur 9: Picture on the Score board

3 Domain model

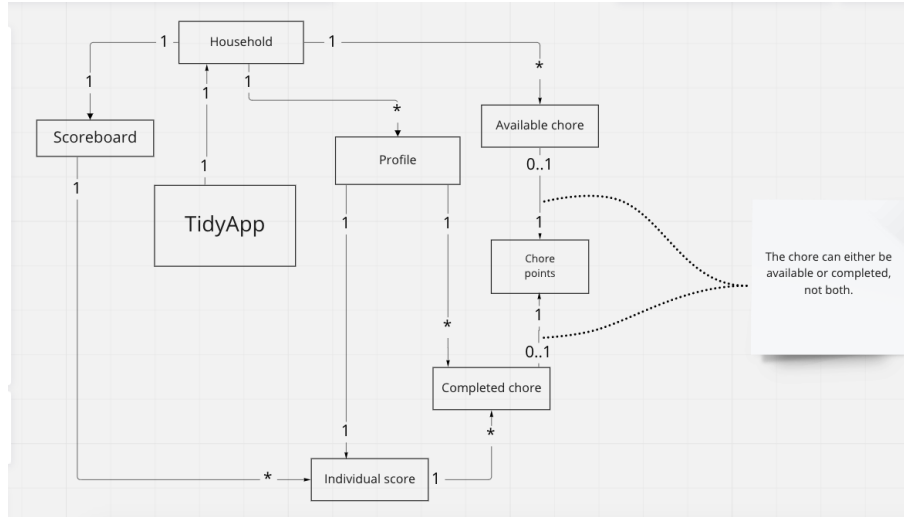


Figure 10: Picture on the domain model

3.1 Class responsibilities

- The responsibility of household is to hold one or several profiles, one scoreboard and an arbitrary amount of available chores.
- The scoreboard is responsible for sorting the profiles according to their individual score and display the result.
- A chore possess a certain amount of points, a chore does not have any responsibility but is considered to be available or completed depending on whether it belong to the profile (completed) or the household (available).
- The responsibility of the profile is to hold the information of the an arbitrary amount of completed chores and their personal score which increase with the amount of done chores

4 References

<https://firebase.google.com/docs>
<https://developer.android.com/guide>