**CS683 Project Assignment   
Homies  
Andrew Ouellette**

[**Overview 2**](https://docs.google.com/document/d/1Cz2e2-gvIBUlTj4ofTjKJ4agpVAG0EUV7WUPrNy32t4/edit#heading=h.g6igqliy7rm)

[**Related Work 2**](https://docs.google.com/document/d/1Cz2e2-gvIBUlTj4ofTjKJ4agpVAG0EUV7WUPrNy32t4/edit#heading=h.bf21eadgjj29)

[**Requirement Analysis and Testing 2-7**](https://docs.google.com/document/d/1Cz2e2-gvIBUlTj4ofTjKJ4agpVAG0EUV7WUPrNy32t4/edit#heading=h.9dheewbiht5g)

[**Design and Implementation 8**](https://docs.google.com/document/d/1Cz2e2-gvIBUlTj4ofTjKJ4agpVAG0EUV7WUPrNy32t4/edit#heading=h.312k3b3li0xh)

[**Project Structure 8**](https://docs.google.com/document/d/1Cz2e2-gvIBUlTj4ofTjKJ4agpVAG0EUV7WUPrNy32t4/edit#heading=h.hkcglxnjhrt2)

[**Timeline 8**](https://docs.google.com/document/d/1Cz2e2-gvIBUlTj4ofTjKJ4agpVAG0EUV7WUPrNy32t4/edit#heading=h.tp0jpote18vj)

[**Future Work (Optional) 8**](https://docs.google.com/document/d/1Cz2e2-gvIBUlTj4ofTjKJ4agpVAG0EUV7WUPrNy32t4/edit#heading=h.wx5fnmke6x6g)

[**Project Demo Links 8**](https://docs.google.com/document/d/1Cz2e2-gvIBUlTj4ofTjKJ4agpVAG0EUV7WUPrNy32t4/edit#heading=h.nl6zntsisnrv)

1. **Overview**

Homies is an application that helps homies living together stay up to date on all information relevant to people living together. Things like when bills are due and who to reimburse, events planned at home, chore duty for the week and important reminders will all be localized in one location. Normally these types of details are scattered between group chats, calendars, notes posted on the fridge and casual conversation. With all this information in all these different locations it can be easy to forget something important and potentially result in an argument. Homies can ensure a peaceful, respectful, courteous, and conscious coexistence that will prevent any sort of issues and conflict. Finding good homies is not easy, and it is a shame to have an honest mistake be the reason for not continuing an arrangement that otherwise works great. The application’s existence is a statement that the people we choose to live with are special and they deserve a unique place to connect.

1. **Related Work**

Homies typically interact with each other often by virtue of living together in proximity through a few different mediums. It would not be uncommon for a group of people living together to communicate reminders in a group chat, events at their home on a Google Calendar and a Google Sheets document for bills. The difference and importance of having Homies is that it is a centralized location of knowledge for all to have on their phone. All the methods mentioned above of communication, via existing applications or more traditional modes, are great. Homies is not an application that is trying to reinvent the wheel but rather integrate existing practices into one ecosystem. The crucial difference with Homies is that its purpose is to keep the people involved connected. When a person goes to their group chat messages, their calendar or even their documents, it is not necessarily because they are thinking about their homies. When a person logs into their Homies application it is precisely because they want to know what is going on with their homies.

1. **Requirement Analysis and Testing**

|  |  |
| --- | --- |
| Title | Create home (Essential) |
| Description | As a user I want to be able to create a home so that I can connect with my homies. |
| Mockups |  |
| Acceptance tests | Given a user opens Homies and clicks on “+” icon they can then fill out a form to create a home by giving it a name and listing the homies that live there. |
| Test Results |  |
| Status | Complete |

|  |  |
| --- | --- |
| Title | View home (Essential) |
| Description | As a user I want to be able to view my home to see important information my homies share with me. |
| Mockups |  |
| Acceptance tests | Given a user is shown a list of homes on the screen and they click on one from the list they will be brought to the home where they can view all the posts they made regarding their homies. |
| Test Results |  |
| Status | Complete |

|  |  |
| --- | --- |
| Title | Create home post (Essential) |
| Description | As a user I want to be able to make a post in one of my homes for me to not forget some information my homie has shared with me. |
| Mockups |  |
| Acceptance tests | Given a user is in a home and they click on the “Edit” icon they will be brought to the form where they can make and save a post. |
| Test Results |  |
| Status | Complete |

|  |  |
| --- | --- |
| Title | Add favorites filter (Desirable) |
| Description | As a user I would like to be able to filter on my favorite Homes on the main page. |
| Mockups |  |
| Acceptance tests | Given a user opens Homies and has homes in which at least one is a favorite when they click the favorite filter in the bottom left only their favorite homes will appear. |
| Test Results |  |
| Status | Complete |

|  |  |
| --- | --- |
| Title | Create account (Optional) |
| Description | As a user I would like to create a Homies account so I can enjoy all that Homies has to offer. |
| Mockups | A screen shot of a phone  Description automatically generated A screen shot of a phone  Description automatically generated |
| Acceptance tests | Given a user opens Homies and is not logged and clicks “Sign Up” they will be brought to the “Sign Up” page where they can create an account. |
| Test Results | A screen shot of a phone  Description automatically generatedA screen shot of a phone  Description automatically generated |
| Status | To do |



1. **Design and Implementation**

* Homies will be implemented using MVVM architecture.
* It will be made up of multiple activities and fragments using Jetpack navigation.
* It will store data using Room Database and SharedPreferences.
* I will need to be able to create multiple pages that a user can interact with for any of the actions mentioned above.
* If I can, I will implement cloud storage and be able to store user emails and passwords and logins.

1. **Project Structure**

A screenshot of a computer program

Description automatically generated

1. **Timeline**

|  |  |  |
| --- | --- | --- |
| Iteration | Application Requirements | Android Components and Features to be used |
| 1 | Essential | Create views and controller (View) |
| 2 | Essential | Implement model (View Model) |
| 3 | Essential | Creating supporting data storage (Model) |
| 4 | Essential | Test and fix issues in application |
| 5 | Optional | Support a favorites filter |
| 6 | Desired | Support user account creation |

1. **Future Work**

In the future I would like to get user account creation implemented so that a user can login to their account if they change phones. This will require me to introduce internet connectivity and utilize cloud storage services. If I were to properly set this functionality up then the next thing for me to do would be to also backup a user’s account data as well. Currently the application offers minimal functionality and because of this I didn’t see any immediate need to introduce cloud storage. However, if I were to add additional features and enhancements I think the increase in data size would benefit from having the information stored on the cloud.

Another enhancement I would like to make is to introduce a broadcast receiver to grab texts from people who have been included in one of the homes. When a text message has been received by someone in one of your homes it could pull in their message and store it under the respective home. This sort of enhancement I think would be difficult to implement. I would not want every single text being sent and stored in a home but rather I would need to have some way to interpret messages intelligently to only store messages that are reminders.

1. **Project Demo Links**