Development of a Chatting Platform

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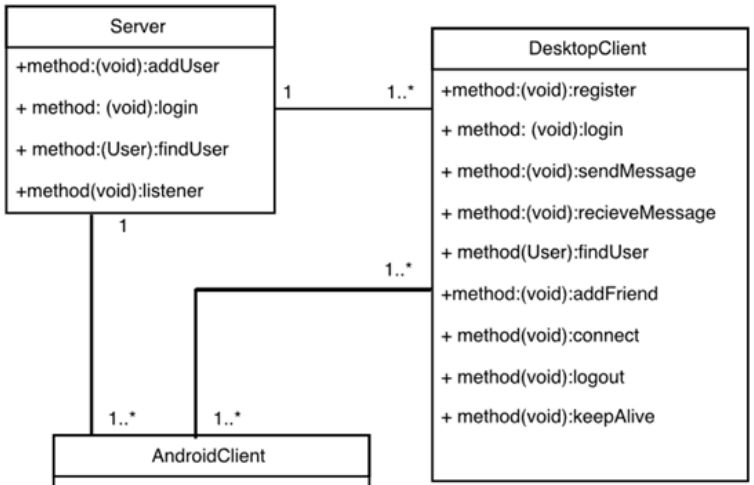
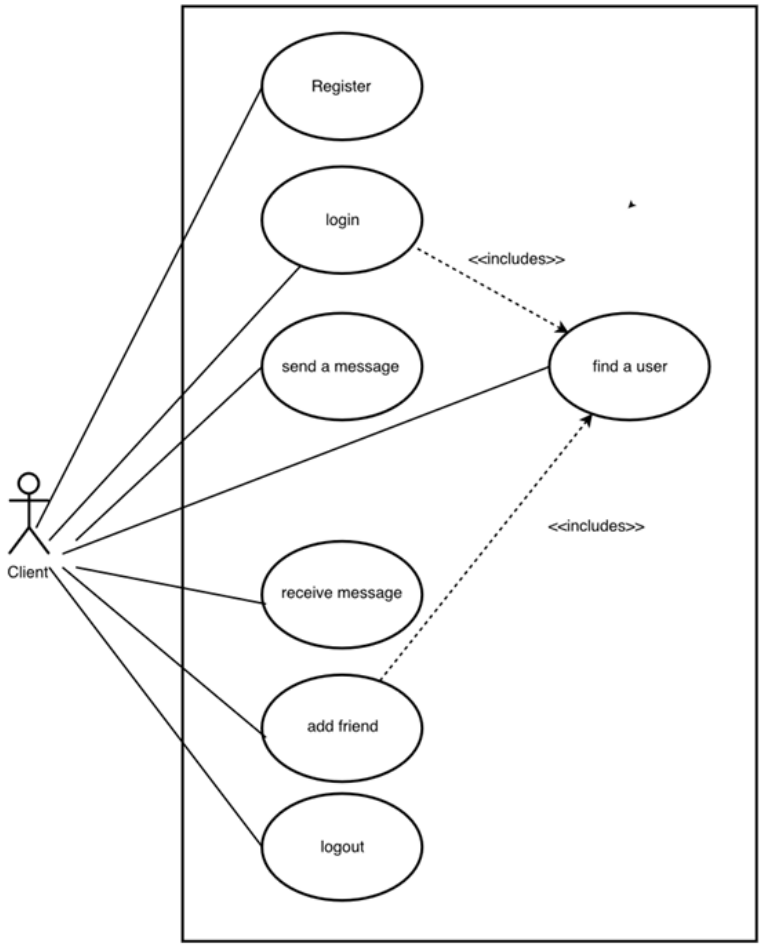
Goals

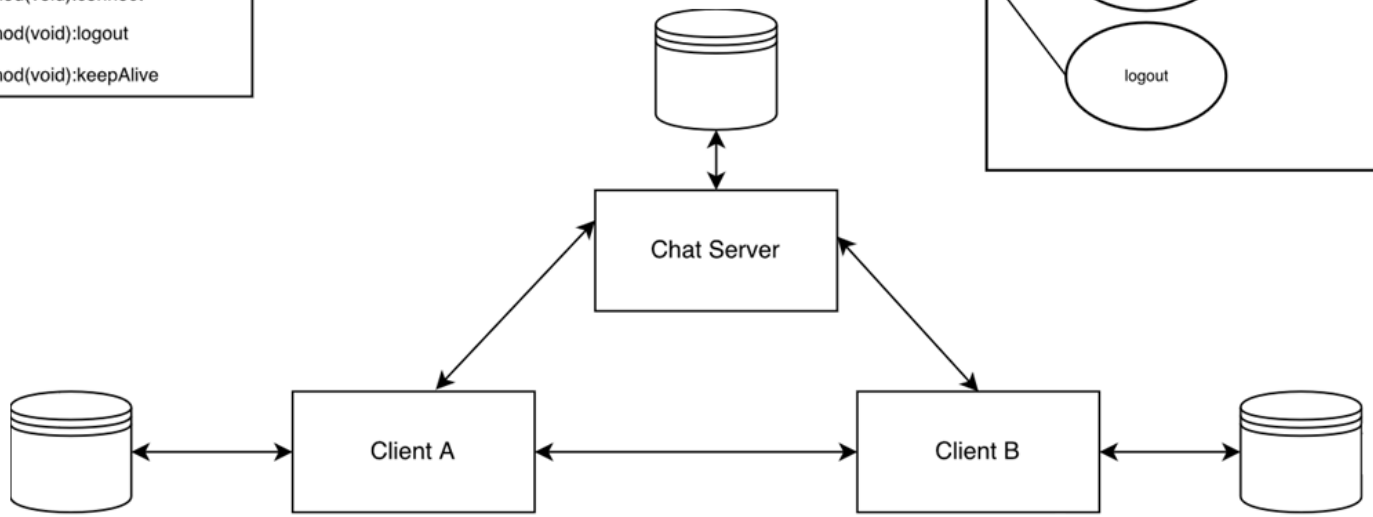
- Deliver client server application with clients developed for two different domains
- Become proficient in employing testing strategies and methods
- Gain experience collaborating as a team
- Become au fait using version control and collaboration software

Implementation Strategy

- Background research was done on how to implement a client server system/application
- Basic prototype was developed to understand how sockets work etc.
- Team will be split into three sub-teams
  - one team will implement the server in python
  - another team will work on the desktop client
  - last team will work on the android client
- Test plans (unit testing and regression & integration testing)


Server
+method:(void):addUser
+ method: (void):login
+ method:(User):findUser
+method(void):listener
DesktopClient
+method:(void):register
+ method: (void):login
+ method:(void):sendMessage
+ method:(void):recieveMessage
+ method(User):findUser
+method:(void):addFriend
+ method(void):connect
+ method(void):logout
+ method(void):keepAlive
1
1..*
1
1..*
1..*
1..*
AndroidClient
+method:(void):register
+ method: (void):login
+ method:(void):sendMessage
+ method:(void):recieveMessage
+ method(User):findUser
+method:(void):addFriend
+ method(void):connect
+ method(void):logout
+ method(void):keepAlive


Register
login
<<includes>>
send a message
find a user
Client
<<includes>>
receive message
add friend
logout


Chat Server
Client A
Client B

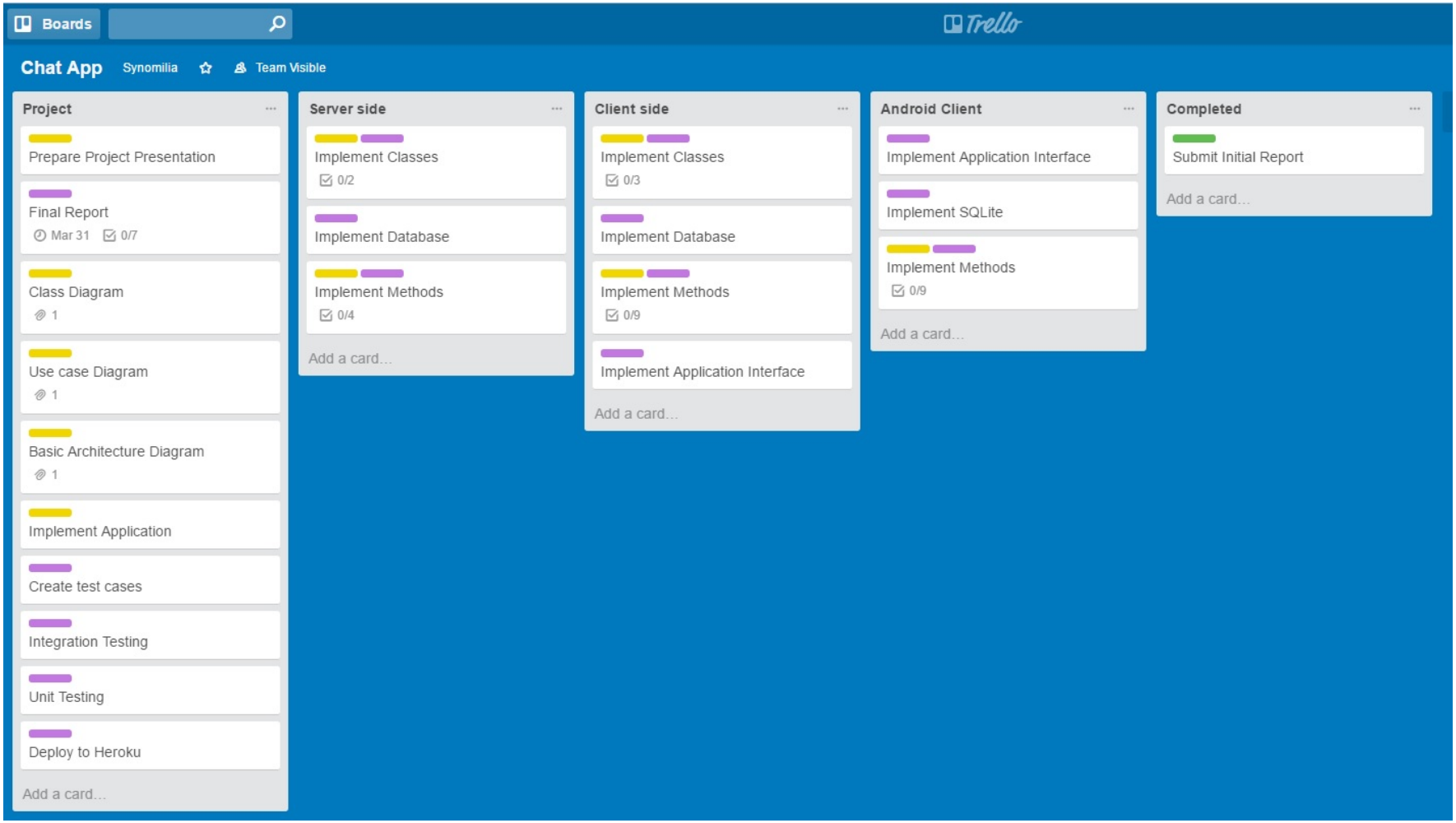
Timeline - Mandatory Features

Deadlines	**Mandatory Feature List**
18/02	Send text based messages to one or more users
18/02	Receive text based messages from one or more users
18/02	Secure communication between users
25/02	Search for other users on the server
25/02	User Registration (New User)
25/02	User authentication (Log in/Log out)
04/03	Chat client for mobile
04/03	Chat client for desktop

Optional Features

With accordance to time availability, optional features can be added.

Optional Feature List	
Set Status	Emojis
Send Images or Files	Backup Chat/Chat Log
Set name/Profile Picture	Remove messages
Delete user account	Chat time stamps
Contact List	Customised Chat background


Boards
Trello
Chat App
Synomilia
Team Visible
Project
Prepare Project Presentation
Final Report
Mar 31
0/7
Class Diagram
1
Use case Diagram
1
Basic Architecture Diagram
1
Implement Application
Create test cases
Integration Testing
Unit Testing
Deploy to Heroku
Add a card...
Server side
Implement Classes
0/2
Implement Database
Implement Methods
0/4
Add a card...
Client side
Implement Classes
0/3
Implement Database
Implement Methods
0/9
Implement Application Interface
Add a card...
Android Client
Implement Application Interface
Implement SQLite
Implement Methods
0/9
Add a card...
Completed
Submit Initial Report
Add a card...

Working Together as a Team

- Initial kick-off meeting and general brainstorming
- Physical meetings are held every Tuesday at 5pm
- Development meetings will be organised at periodic intervals
- Skype/virtual meetings will be organised on-demand
- WhatsApp group for instant communication

Conflicts Resolution

Peer assessment: equal distribution of marks
Few of the potential sources of conflicts could be:

- Difference of opinions on prioritization
- Technical and design disagreements
- Disagreements on schedule or timeline
- Lack of consensus on unified process methodologies

Few solutions that we expect to adopt are:

- Mutual cooperation and taking ownership of any proposed idea
- Having a consensus on the decision taken by the group and abiding by it