



Diglett Chat Application

Team 2

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Agenda

- System Functionality
- System Architecture
- Job Quality
- Process and Teamwork
- Technology Transfer

System Functionality

Functional Achievements:

- Sending message
- Receiving message
- Delete/recall message
- Reply group message
- Store message
- Find other people or groups

Performance Promise:

- Support at least 500 simultaneous users
- Send messages within 5 seconds

System Functionality

Achieve most of the features listed in SRS

Next steps for the the project continue in the future :

- Support media message
- Translate message
- Find people in user's circle
- Forward a media message

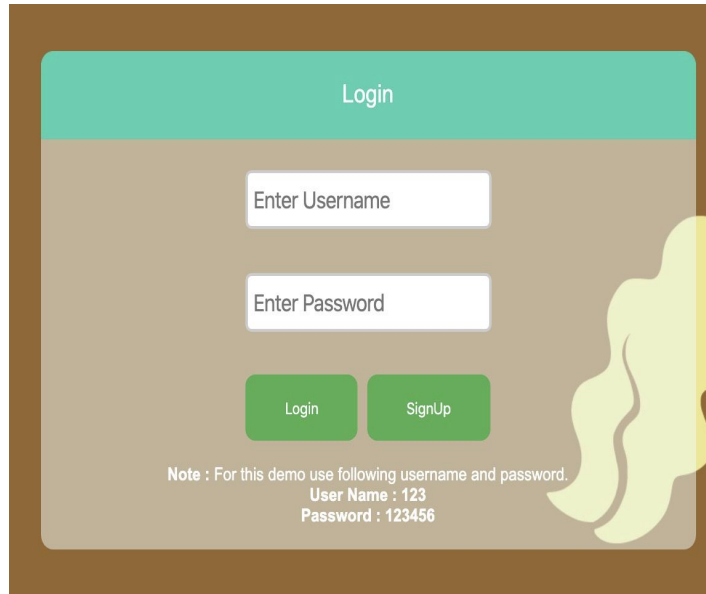
Specific requirements

| | |
|--|---|
| 3.1 External interfaces | |
| 3.1.1 User Interfaces ----- | ✓ |
| 3.1.2 Communication interface ----- | ✓ |
| 3.2 Functional Requirements | |
| 3.2.1 Sending message ----- | ✓ |
| 3.2.2 Receiving message ----- | ✓ |
| 3.2.3 Delete/recall message ----- | ✓ |
| 3.2.5 Support media in message ----- | ✗ |
| 3.2.6 Message Storage ----- | ✓ |
| 3.2.7 Expose message to the user ----- | ✓ |
| 3.2.8 Support different character sets ----- | ✓ |
| 3.2.9 Translate message ----- | ✗ |
| 3.2.10 Security ----- | |
| 3.2.11 Find people in a user's circle | ✓ |
| 3.2.12 Find other people or groups ----- | ✗ |
| 3.2.13 Follow groups ----- | ✓ |
| 3.2.14 Forward a media message ----- | ✓ |
| 3.3 Performance requirements ----- | ✗ |
| ----- | ✓ |

System Functionality

External interfaces Functionalities:

- Login page
- Register page



The login page features a teal header with the word "Login" in white. Below the header, there are two white input fields with rounded corners: "Enter Username" and "Enter Password". At the bottom, there are two green buttons with white text: "Login" and "SignUp". A note at the bottom of the form area reads: "Note : For this demo use following username and password. User Name : 123 Password : 123456". The background is brown with a stylized yellow and green flame-like graphic on the right side.

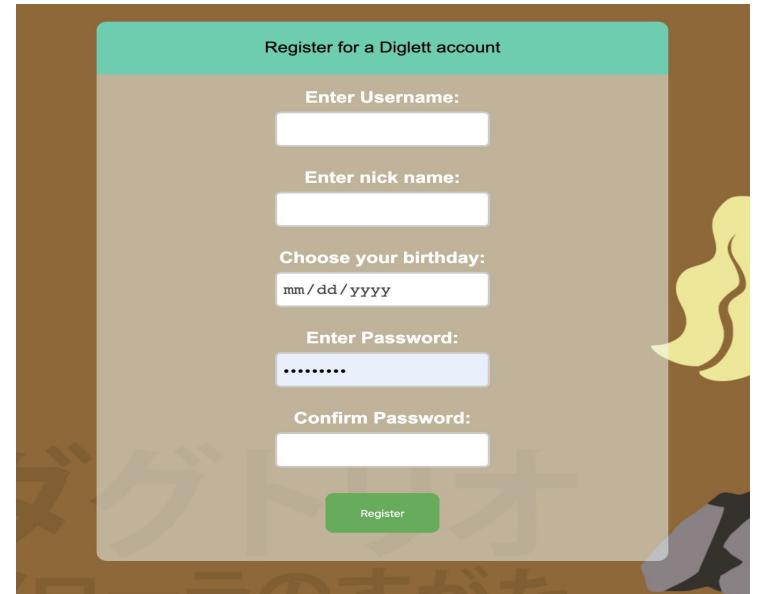
Login

Enter Username

Enter Password

Login SignUp

Note : For this demo use following username and password.
User Name : 123
Password : 123456



The register page features a teal header with the text "Register for a Diglett account" in white. Below the header, there are four white input fields with rounded corners: "Enter Username:", "Enter nick name:", "Choose your birthday:" (with a placeholder "mm / dd / yyyy"), and "Enter Password:" (with a placeholder "....."). Below these is a "Confirm Password:" field. At the bottom, there is a green button with white text: "Register". The background is brown with a stylized yellow and green flame-like graphic on the right side.

Register for a Diglett account

Enter Username:

Enter nick name:

Choose your birthday:
mm / dd / yyyy

Enter Password:
.....

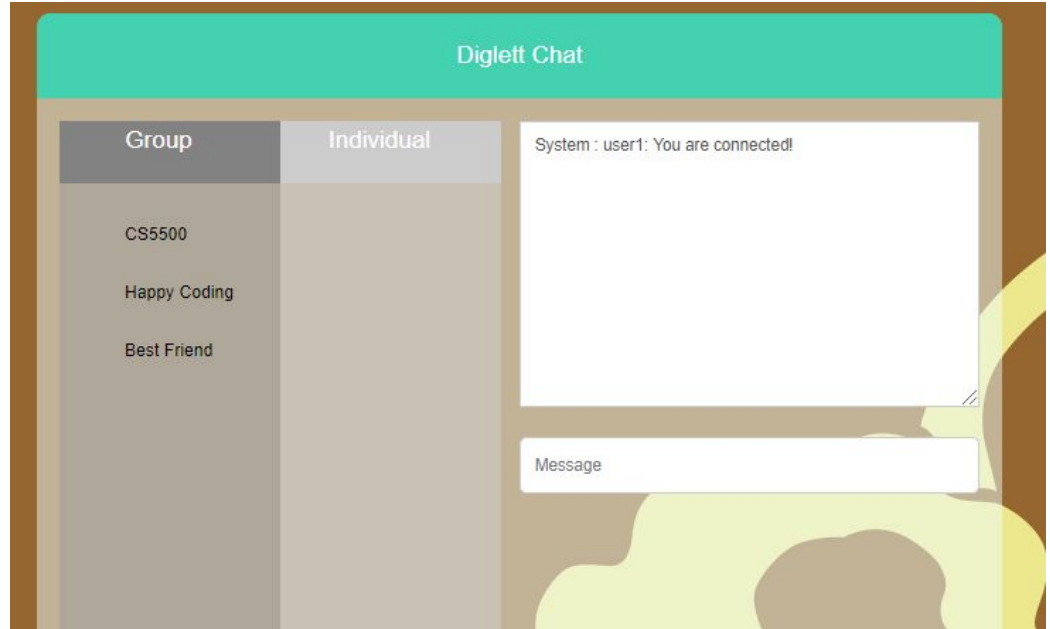
Confirm Password:

Register

System Functionality

External interfaces Functionalities:

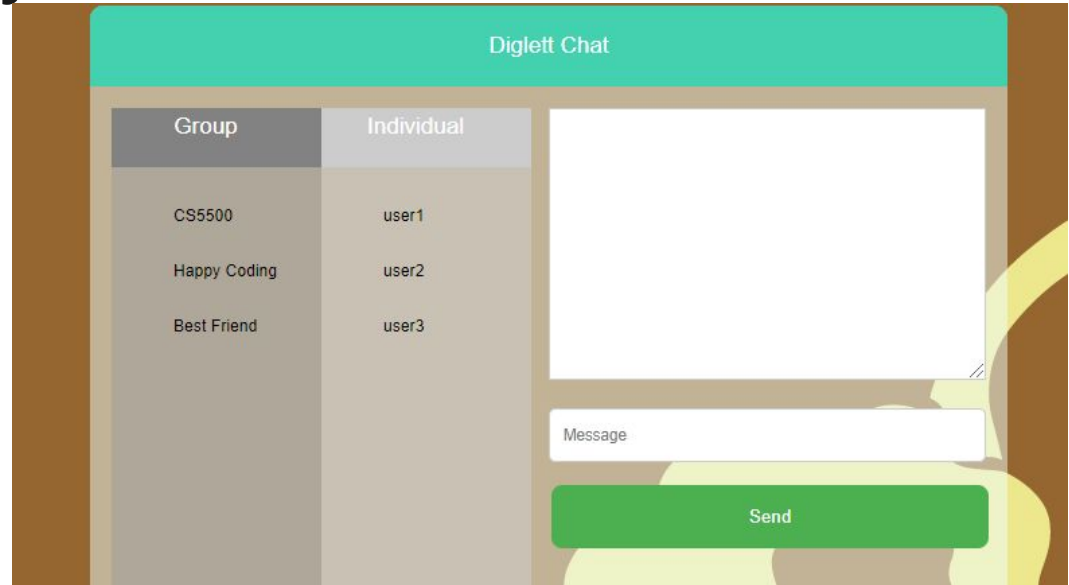
- Chatting page
 - Individual chat
 - Group chat



System Functionality

External interfaces Functionalities:

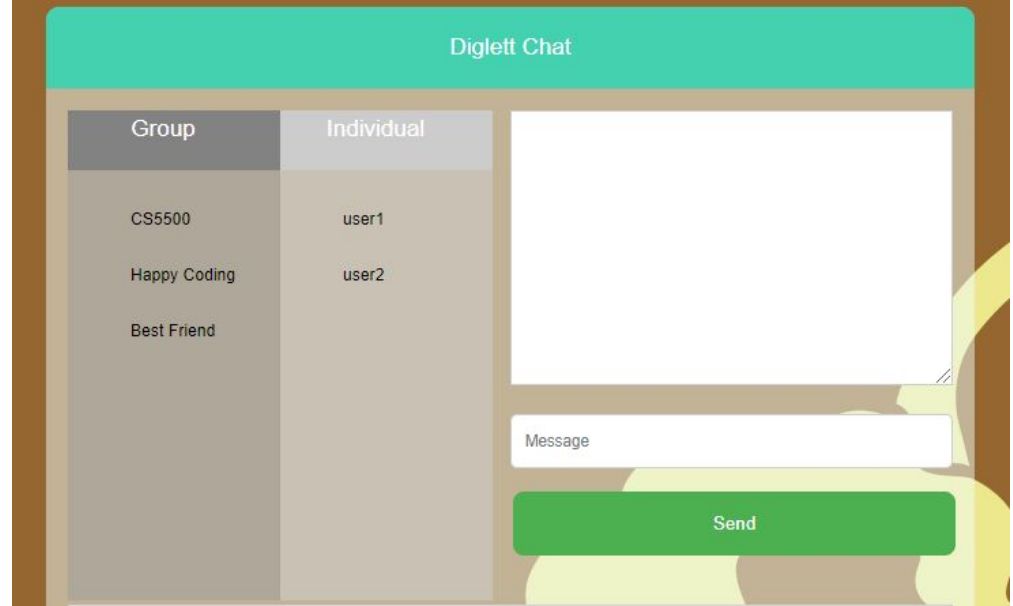
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System Functionality

External interfaces Functionalities:

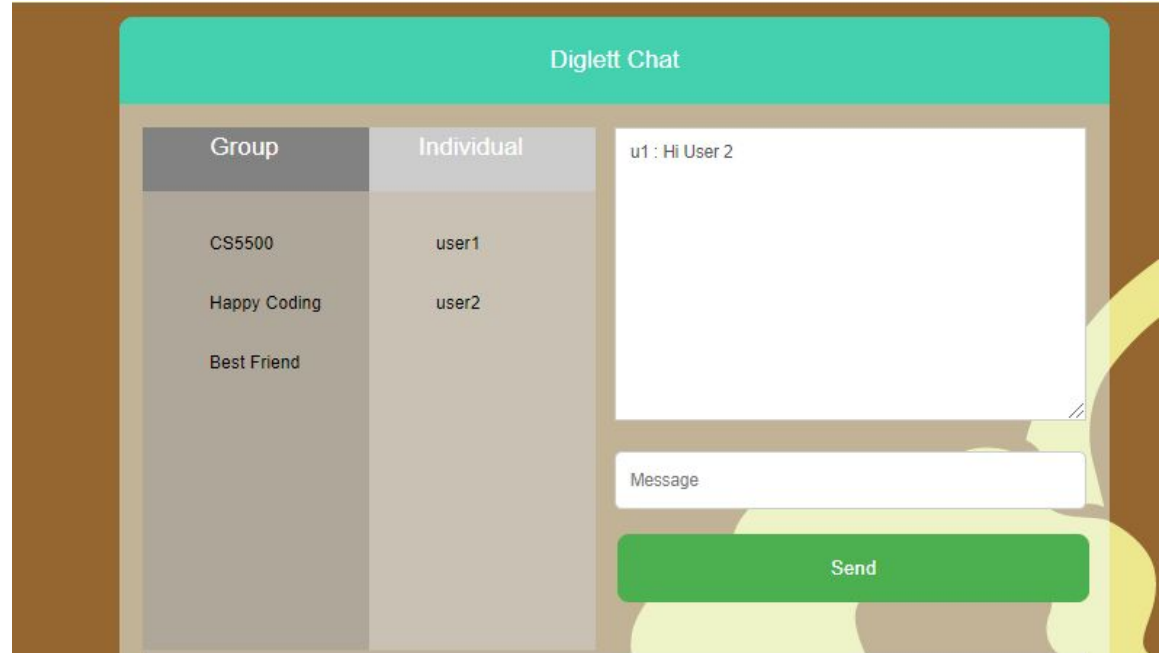
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System Functionality

External interfaces Functionalities:

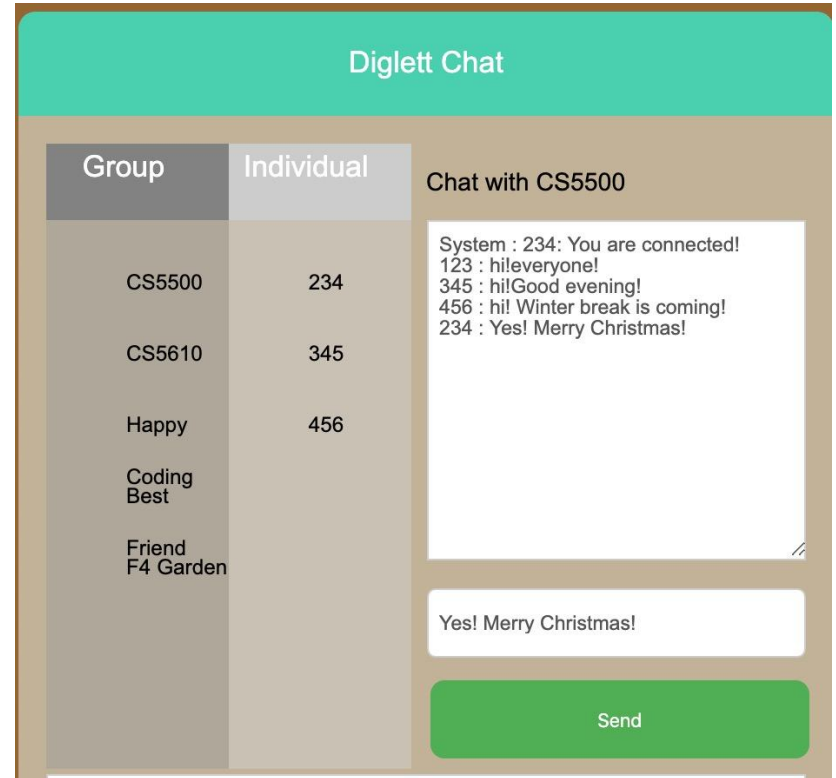
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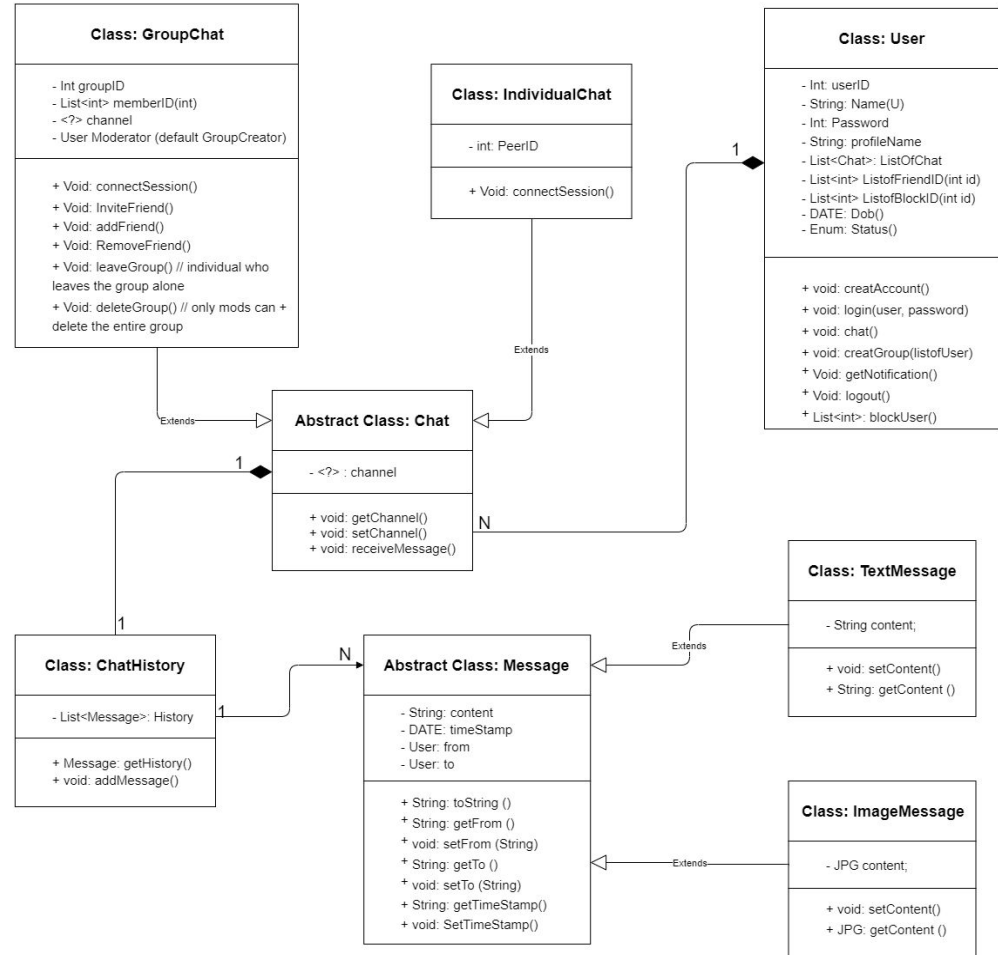
System Functionality

External interfaces Functionalities:

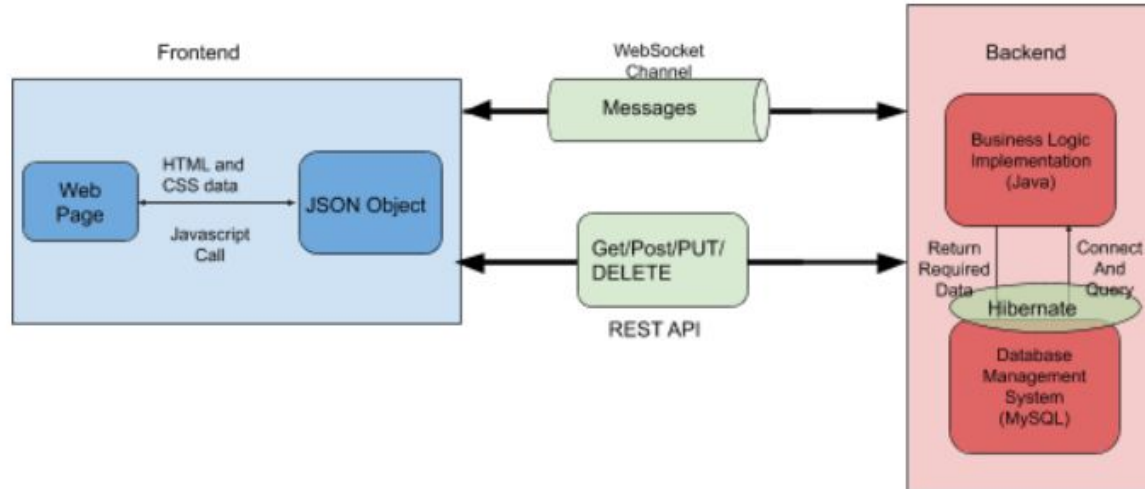
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Database Design



System architecture

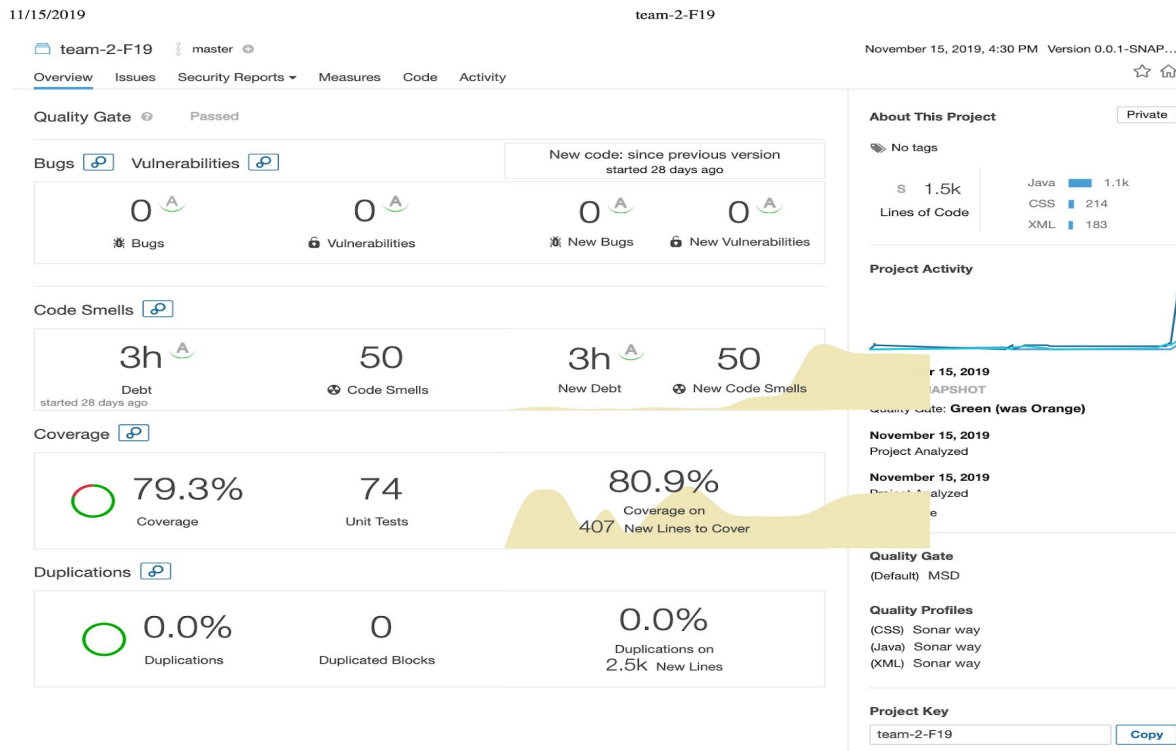


Job Quality

Overall achieved 80% Test coverage

Issues and Challenges:

- Need to achieve 80% coverage
- Project consists 20% Javascript code
- Test Javascript code using JEST

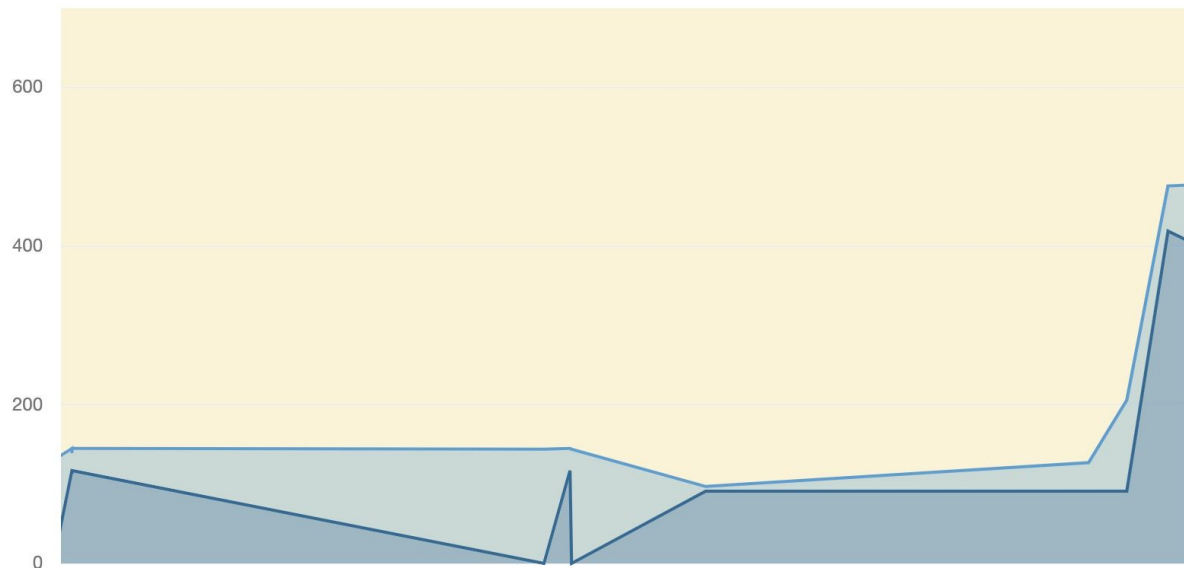


Job Quality



Coverage ▾

Lines to Cover Covered Lines



Process and Teamwork



Team:

- Team has regular meetings twice a week
- Evaluate workload and estimate deliverables
- Discuss and categorize tasks
- Communicate via email and message
- Teamwork process: two front-end developer and two back-end developer

Scrum master:

- Coordinate meetings
- Distribute tasks based on individuals' field of expertise
- Encourage teammates
- Help team members as needed



Process and Teamwork

Build, test, and promote processes:

- Using Jenkins and Maven to automatically build, test and run the code.

Shortcomings and challenges:

- No web developing experience
- Steep learning curve
- Spend tons of time learning technologies (WebSocket, AJAX, JSON, JEST, etc)



Technology Transfer

System in shape to be handed over to the client:

- Users with a middle-school education level should be able to handle most of diglett chat functionalities after reading the user's guide.

Next steps for the the project continue in the future :

- Support media message
- Translate message
- Find people in user's circle
- Forward a media message



Reference

- <https://pokemongohub.net/post/meta/alolan-dugtrio-meta-analysis/>
- <https://howtodoinjava.com/hibernate-tutorials/>
- <https://www.freecodecamp.org/news/building-a-chat-application-with-mean-stack-637254d1136d/>