

Testing

Product Name: QueuedUp

Team Name: QueuedUp

Our Team adopted the test-driven development (TDD) process. This software development process relies on the repetition of very short development cycles. How this paired with SCRUM methodology had both pros and cons.

Pros: SCRUM relies on quality produced development which is ensured within each sprint using the TDD. Like SCRUM, Test Driven Development works in short development periods.

Cons: Because each of the sprints are limited to a set number of days, the production rate tends to decline due to the setbacks of testing along the way.

Testing tools:

- We used Postman to send HTTP requests to the server to do various tests on each route.
- The extension Redux DevTools was used to view and test our states.

Example test 1: login for user sorathedog@ucsc.edu, password 123456

Login:

Endpoint: <https://us-central1-queuedup-123.cloudfunctions.net/api/login>

Headers:

```
{ "Content-type" : "application/json" }
```

Login Test 1: incorrect email address

Body:

```
{  
  "email": "soradog@ucsc.edu",  
  "password": "012345"  
}
```

Response: 403 Forbidden: { "info": "Incorrect login information" }

Login Test 2: Incorrect password:

Body:

```
{  
  "email": "sorathedog@ucsc.edu",  
  "password": "012345"  
}
```

Response: 403 Forbidden: { "info": "Incorrect login information" }

Login Test 3: correct username and password

Body:

```
{
  "email": "sorathedog@ucsc.edu",
  "password": "012345"
}
```

Response: 200 OK

```
{
  "token": { big token string }
}
```

Example test 2: create post with token from login test

Headers:

```
{ "Content-type" : "application/json" }
{ "Authorization" : "Bearer { token from previous test }" }
```

Post Test 1: Attempt to post with expired token

Response:

```
{
  "error": "auth/id-token-expired",
  "message": "Error with token verification"
}
```

Post Test 2: Attempt to post with incorrect token

Response:

```
{
  "error": "auth/argument-error",
  "message": "Error with token verification"
}
```

Post Test 3: Attempt to login with correct token from login test

Response: 200 OK

```
{
  "username": "igotrobbedlol",
  "content": "Thanks for the fun quarter!",
  "imageUrl":
"https://firebasestorage.googleapis.com/v0/b/queuedup-123.appspot.com/o/7544096705.jpg?alt=media",
  "createdAt": "2020-07-22T21:45:05.806Z",
  "increments": 0,
}
```

```
    "decrements": 0  
}
```