Gabe Coelho - CS 340 - PM #3a

User Authentication

Users will enter an email, a handle, and a password into the app. After the correct verifications have been made (whether username and/or email are already in use), users are taken to the next screen, where they can upload a picture, and are required to enter first and last names. When users tap the "Get Started" button, the call is made to *Amplify (Cognito)* to handle the authentication. User accounts will be created at that point to then be redirected to the main app page.

The tables below consist of the general API design and request/response designs for each endpoint. They have been separated into three different tables to facilitate and improve readability.

Web API Design

Twitter API General

| Name | Method | URL | Description | Authenticated |
|-----------------|--------|-------------|-----------------------------------------------------------------------------------|---------------|
| <u>Register</u> | POST | AWS Amplify | Register a user into the app. Uses AWS Amplify | No |
| <u>Login</u> | POST | AWS Amplify | Logs a registered user into the app with their set preferences. Uses AWS Amplify. | No |
| Logout | GET | AWS Amplify | Logs a logged in user out of the app. Uses AWS Amplify. | No |

| Name | Method | URL | Description | Authenticated |
|-----------------|--------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Get User | GET | /user/:username | Returns a user profile view. The :username parameter specifies the alias of the user we want to find. | No |
| Edit Picture | PATCH | /user/:username/edit/picture | Edits the user's profile picture. The :username parameter is the user's whose picture will be edited. The picture endpoint expects a picture url in the request body. | Yes |

| Name | Method | URL | Description | Authenticated |
|----------------------------|--------|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <u>Get</u> <u>Story</u> | GET | /user/:username/story? lastkey=aabbcc&pagesize=20 | Returns the list of statuses from a specified user. The :username parameter specifies the alias of the user whose story we want. The lastkey parameter ensures that only results that are after the cursor will be returned. This is the key of the last item returned in the previous page. If not specified, the first page of followers is returned. The pagesize parameter specifies the maximum number of followers to return. It defaults to 25. | No |
| Get Feed | GET | /user/:username/feed/? lastkey=aabbcc&pagesize=20 | Returns the list of statuses from users the user is following, along with the user's own statuses. Parameters are the same as "Get Story" | Yes |

| Name | Method | URL | Description | Authenticated |
|-----------------------------|--------|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Follow | POST | /user/:follower/follow/:followee | Follow a user. The :follower parameter is the username/alias of the user who is requesting to follow the :followee, which also a username/alias. | Yes |
| Unfollow | POST | /user/:follower/unfollow/:followee | Unfollow a user. The :follower parameter is the username/alias of the user who is requesting to unfollow the :followee, which also a username/alias. | Yes |
| Get Followers | GET | /user/:username/followers? lastkey=aabbcc&pagesize=20 | Returns a list of followers (users) of a specified user. Parameters are the same as "Get Story." | No |
| Get Following | GET | /user/:username/following? lastkey=aabbcc&pagesize=20 | Returns a list of users who the specified user follows. Parameters are the same as "Get Story." | No |
| <u>Get</u> <u>Status</u> | GET | /status/:id | Returns a specific status. The :id parameter is the id of the status we want to return. | No |

| Name | Method | URL | Description | Authenticated |
|------------------------------|--------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <u>Post</u> <u>Status</u> | POST | /status/post | Post a new status. | Yes |
| <u>Get</u> <u>Hashtag</u> | GET | /status/hashtag/:hashtag? lastkey=aabbcc&pagesize=20 | Returns a list of statuses with the specified hashtag. Repeated hashtags in the same status are only returned once. Parameters are the same as "Get Story" | No |

Twitter API - Request

| Name | Method | Request Headers | Request Body | Authenticated |
|----------------------------|--------|-----------------------------------------------|------------------------------------------------|---------------|
| Register | POST | Using AWS Amplify | Using AWS Amplify | No |
| <u>Login</u> | POST | Using AWS Amplify | Using AWS Amplify | No |
| Logout | GET | Using AWS Amplify | Using AWS Amplify | No |
| Get User | GET | None | None | No |
| Edit Picture | PATCH | accept: application/json authorization: token | { username: username, pictureUrl: pictureUrl } | Yes |
| <u>Get</u> <u>Story</u> | GET | None | None | No |
| Get Feed | GET | accept: */* authorization: token | None | Yes |
| <u>Follow</u> | POST | accept: application/json authorization: token | { follower: username, followee: username } | Yes |

| Name | Method | Request Headers | Request Body | Authenticated |
|------------------------------|--------|-----------------------------------------------|---------------------------------------------------------------------------------------|---------------|
| Unfollow | POST | accept: application/json authorization: token | { follower: username, followee: username } | Yes |
| Get Followers | GET | None | None | No |
| Get Following | GET | None | None | No |
| <u>Get</u> <u>Status</u> | GET | None | None | No |
| Post Status | POST | accept: application/json authorization: token | { id: unique_id, username: username, message: message, attachmentUrl: attachmentUrl } | Yes |
| <u>Get</u> <u>Hashtag</u> | GET | None | None | No |

Twitter API - Response

| Name | Method | Response Headers | Response Body | Authenticated |
|-----------------|--------|----------------------|-------------------|---------------|
| <u>Register</u> | POST | Using AWS Amplify | Using AWS Amplify | No |
| <u>Login</u> | POST | Using AWS Amplify | Using AWS Amplify | No |
| <u>Logout</u> | GET | Using AWS Amplify | Using AWS Amplify | No |

| Name | Method | Response Headers | Response Body | Authenticated |
|-----------------|--------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Get User | GET | content-type: application/json | 200 level: A JSON string containing the user specified by the ID like the following: { id: id, name: name, handle: handle, pictureUrl: pictureUrl, } 400 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } 500 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } | No |
| Edit Picture | PATCH | content-type: application/json | 200 level: A JSON string containing the response code like the following: { response_code: "200 OK" } 400 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } 500 level: A JSON string containing the error code and message like the following: { response_code: error_code, message like the following: { response_code: error_code, message: message } | Yes |

| Name | Method | Response Headers | Response Body | Authenticated |
|----------------------------|--------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <u>Get</u> <u>Story</u> | GET | content-type: application/json | 200 level: A JSON string containing an array of statuses in the following format: { name: name, handle: handle, pictureUrl: pictureUrl, message: message, timestamp: timestamp attachment: attachment } 400 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } 500 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } | No |
| Get Feed | GET | content-type: application/json | 200 level: A JSON string containing an array of statuses in the following format: { name: name, handle: handle, pictureUrl: pictureUrl, message: message, timestamp: timestamp attachment: attachment } 400 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } 500 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } | Yes |

| Name | Method | Response Headers | Response Body | Authenticated |
|--------------------------------|--------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <u>Follow</u> | POST | content-type: application/json | 200 level: A JSON string containing an array of statuses in the following format: { response_code: "200 OK" } 400 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } 500 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } | Yes |
| <u>Unfollow</u> | POST | content-type: application/json | 200 level: A JSON string containing an array of statuses in the following format: { response_code: "200 OK" } 400 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } 500 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } | Yes |
| <u>Get</u> <u>Followers</u> | GET | content-type: application/json | 200 level: A JSON string containing an array of users in the following format: { id: id, name: name, handle: handle, pictureUrl: pictureUrl, } 400 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } 500 level: A JSON string containing the error code and message like the following: { | No |
| | | | response_code: error_code, message: message } | |

| Name | Method | Response Headers | Response Body | Authenticated |
|-----------------------------|--------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Get Following | GET | content-type: application/json | 200 level: A JSON string containing an array of users in the following format: { id: id, name: name, handle: handle, pictureUrl: pictureUrl, } 400 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } 500 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } | No |
| <u>Get</u> <u>Status</u> | GET | content-type: application/json | 200 level: A JSON string containing a status in the following format: { name: name, handle: handle, pictureUrl: pictureUrl, message: message, timestamp: timestamp attachment: attachment } 400 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } 500 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } | No |

| Name | Method | Response Headers | Response Body | Authenticated |
|------------------------------|--------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Post Status | POST | content-type: application/json | 200 level: A JSON string containing an array of statuses in the following format: { response_code: "200 OK" } 400 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } A JSON string containing the error code and message like the following: { response_code: error_code, message like the following: { response_code: error_code, message: message } | Yes |
| <u>Get</u> <u>Hashtag</u> | GET | content-type: application/json | containing an array of statuses in the following format: { name: name, handle: handle, pictureUrl: pictureUrl, message: message, timestamp: timestamp attachment: attachment } 400 level: A JSON string containing the error code and message like the following: { response_code: error_code, message: message } 500 level: A JSON string containing the error code and message like the following: { response_code: error_code, message like the following: { response_code: error_code, message: message } | No |
| <u>Untitled</u> | | | | |