

My backend consists of the following services:

API Gateway

From any front end, you may send a standard HTTP request to my API Gateway. The Gateway is set up to run lambda functions as API Gateway Proxies, which allows me to easily access path and query parameters from inside the lambda function.

Lambda Functions (DAOs)

Along with my lambda function handlers, I package some more code which includes services such as the User service and the Status service, which are all connected to DAOs for each of my DynamoDB tables.

DynamoDB and S3

My data is stored in 5 tables:

1. User
 - a. Contains aliases, names, and photo keys for the S3 bucket that stores images
2. Follows
 - a. Simple relation between follower and followee, stored with followee as the sort key
 - b. Indexed to easily find both people you're following, and the people that are following you
3. Status
 - a. Stores aliases, timestamps, text, and any attachments for every status
 - b. alias is partition key, timestamp is sort key
 - c. Attachments are stored in S3
4. Feed
 - a. Same as status table except the follower is the partition key
5. Hashtag
 - a. Same as status table except the hashtag is the partition key

Cognito (Authentication)

Authentication is handled by Amplify Cognito, which takes care of logging in/out, sessions, and user password storage.