

# Project Report

**Student:** Bradley Dodds

**Application:** Authentication & Communication Mobile Application Using AWS

**Details:** Amazon AWS features will be used to create and communication based application in real time and with validate user authentication and assign each user a unique identifier.

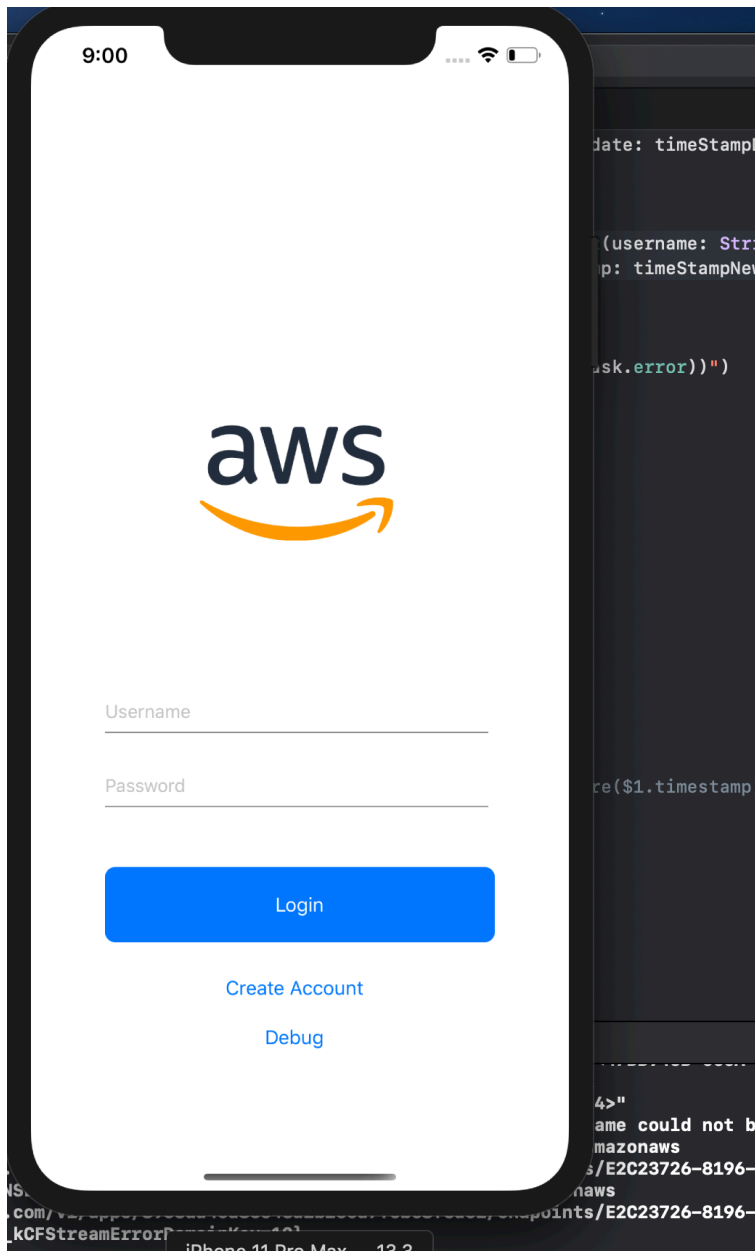
**Programming Language:** Swift

**Device:** IOS

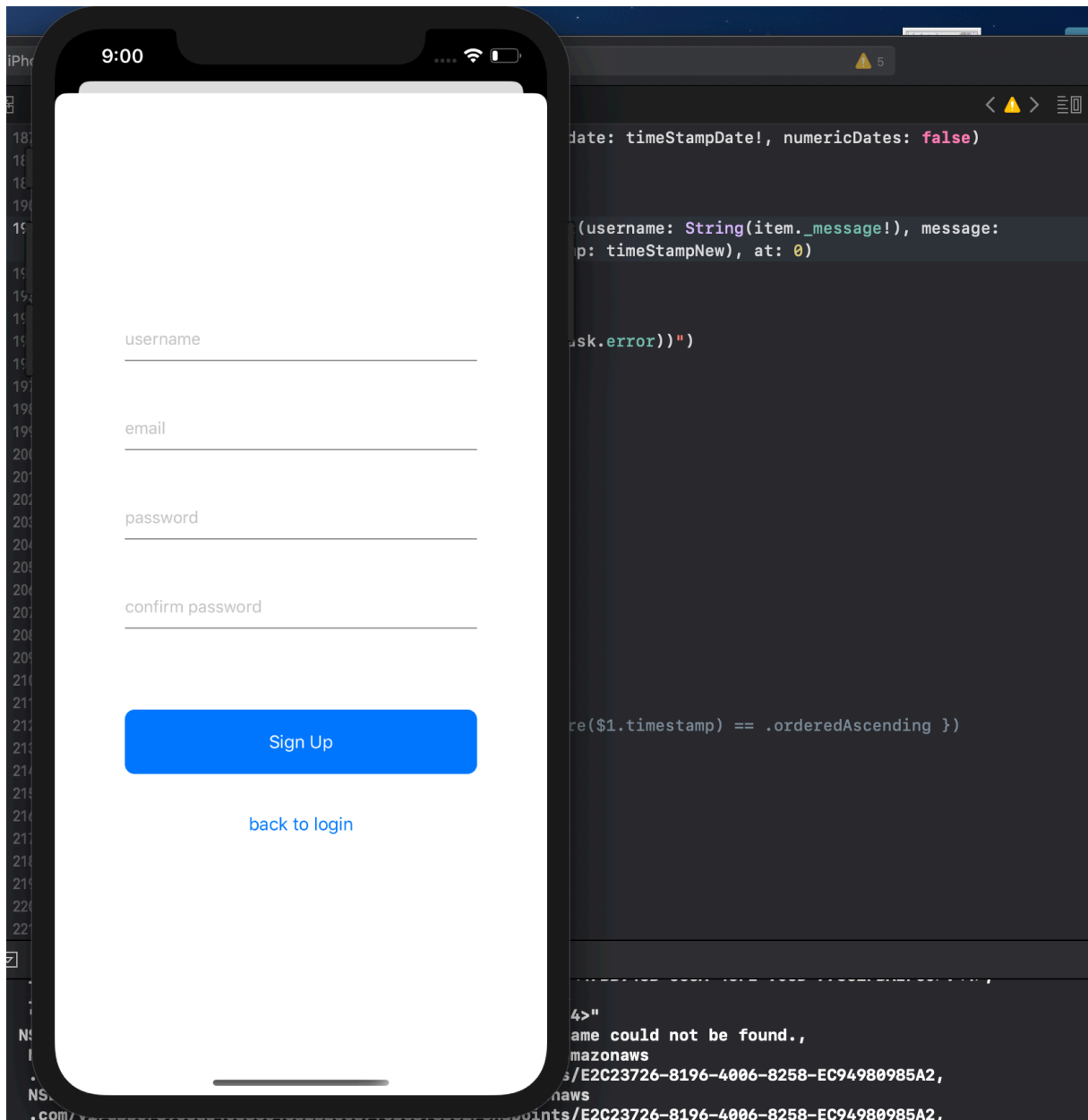
**AWS Features:** Mobile Hub, Dynamo DB, Cognito, IAM

## Sign In

User will be prompted to sign in or create an account



**Creating an Account** - user will be prompted to enter features such as username, email, and password.



Once an account is created their features will be save in **Amazon Cognito** user pool with a unique user id.

## AppUsers

## General settings

## Users and groups

Attributes

Policies

MFA and verifications

Advanced security

Message customizations

Tags

Devices

App clients

Triggers

Analytics

## App integration

App client settings

Domain name

## Users

## Groups

Import users

Create user

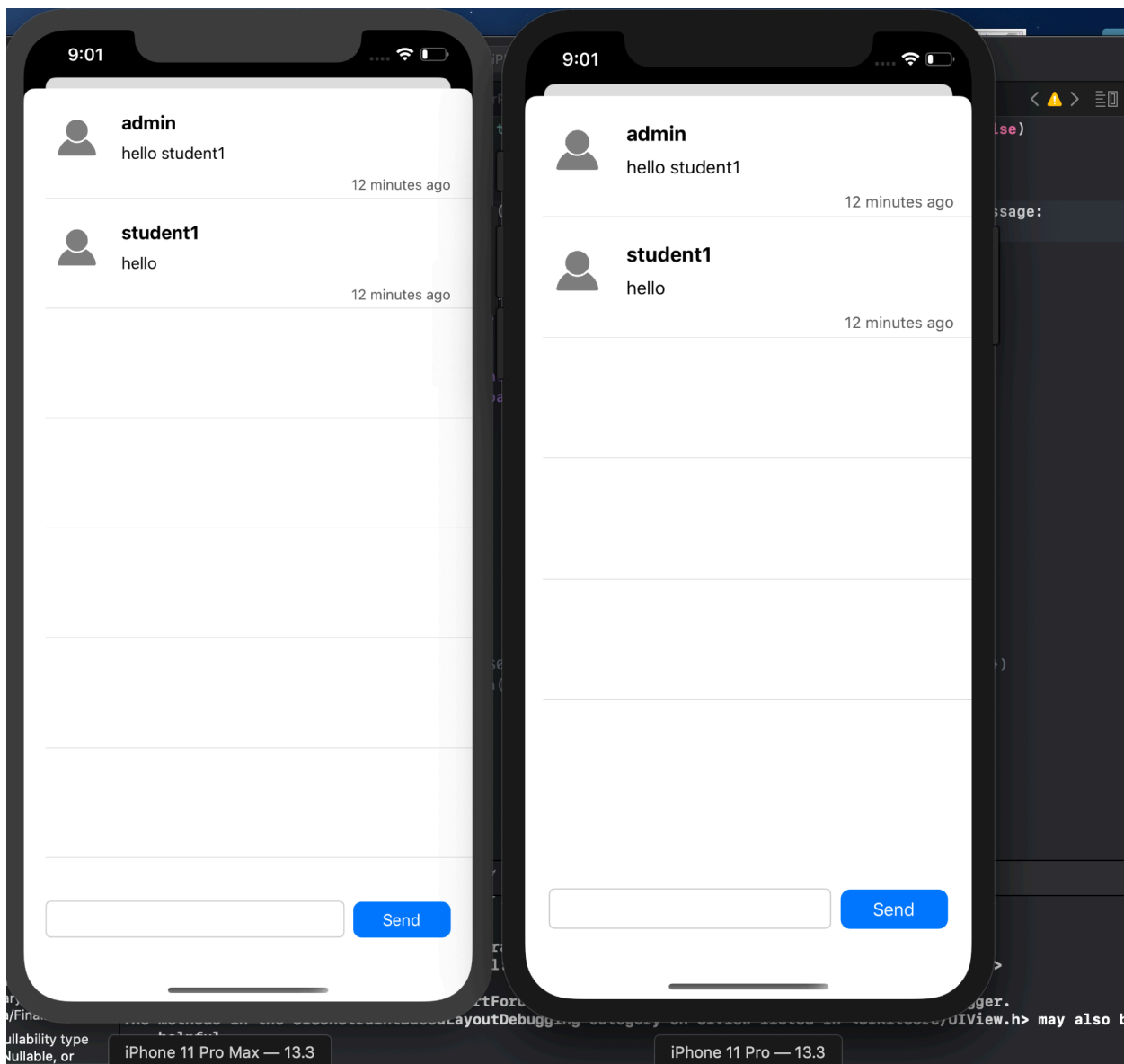
User name

Search for value...

Username	Enabled	Account status	Email verified	Phone number verified	Updated	Created
admin	Enabled	CONFIRMED	false	-	Dec 12, 2019 11:53:42 AM	Dec 12, 2019 11:53:03 AM
student1	Enabled	CONFIRMED	false	-	Dec 21, 2019 4:48:31 AM	Dec 21, 2019 4:48:13 AM
student	Enabled	CONFIRMED	false	-	Dec 9, 2019 7:36:16 PM	Dec 9, 2019 7:36:07 PM

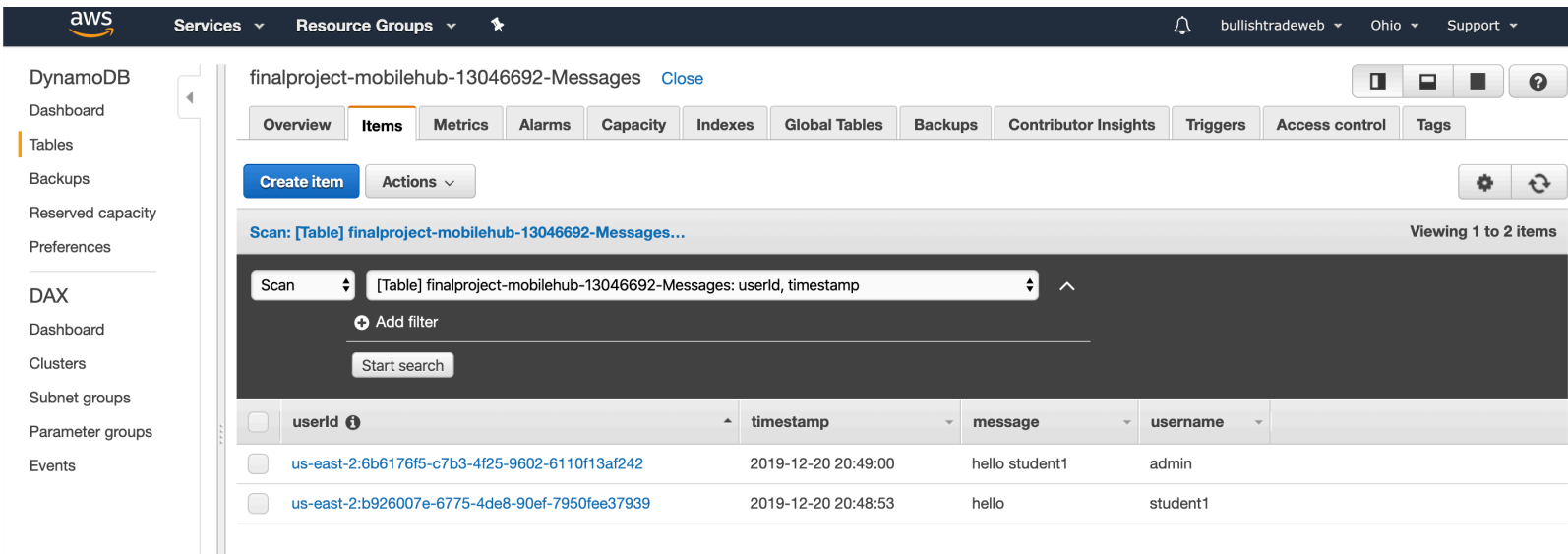
Chat communication using **Amazon Dynamo DB Tables**

Once a user is logged in they will be able to communicate with other users that are recognized by a unique user id.



## Dynamo DB Table data

Communication data is stored in dynamo db NoSQL database



The screenshot shows the AWS Management Console interface for a DynamoDB table named 'finalproject-mobilehub-13046692-Messages'. The 'Items' tab is active, showing a list of items. The table has four columns: 'userId', 'timestamp', 'message', and 'username'. Two items are displayed:

userId	timestamp	message	username
us-east-2:6b6176f5-c7b3-4f25-9602-6110f13af242	2019-12-20 20:49:00	hello student1	admin
us-east-2:b926007e-6775-4de8-90ef-7950fee37939	2019-12-20 20:48:53	hello	student1

## Mobile HUB Representing Amazon features for mobile development

### Backend

A list of backend features you have enabled in your project.



#### Messaging and Analytics

Engage users with mobile push, emails, or SMS messages and analyze app usage.

Powered by Amazon Pinpoint



#### User Sign-in

Let your users sign in with public identity providers or your own identity system.

Powered by Amazon Cognito



#### NoSQL Database

Store data in a fully managed cloud database.

Powered by Amazon DynamoDB

