

# CVWO Winter Assignment

## AY 2022/23

Gossip with Go  
Final Write-up

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# Usage

1. Register for a new account using the “Register” button.

Gossip

LOGIN REGISTER

Create a new account!

Start your gossiping here today :)

Handle

johnapple

Email

johnapple@example.com

Password

\*\*\*\*\*

REGISTER

Gossip CREATE

JOHNAPPLE

awfwaefaw

awfwaefeaw

by janeapple on 25 Jan 2023, 15:43

0 1

Test post

by james appleseed person thingy haha lmaooo okay

by jamesappleseed on 25 Jan 2023, 11:32

1 4

This is the fourth post in the series

Finally something is going on...

by johndoe on 23 Jan 2023, 17:44

2. Create a new post using the “Create” button.

Gossip CREATE

JOHNAPPLE

Create New Post

Title

Hello, world!

Body

What is the name of this item here in Singapore?

CREATE

Gossip CREATE

JOHNAPPLE

Hello, world!

What is the name of this item here in Singapore?

by johnapple on 25 Jan 2023, 16:11

0 0

awfwaefaw

awfwaefeaw

by janeapple on 25 Jan 2023, 15:43

0 1

Test post

by james appleseed person thingy haha lmaooo okay

by jamesappleseed on 25 Jan 2023, 11:32

3. Comment on posts by clicking on the comment icon, entering your comment body and then clicking “Post”.

Gossip CREATE

JOHNAPPLE

Hello, world!

What is the name of this item here in Singapore?

by johnapple on 25 Jan 2023, 16:11

0 0

There are no comments yet.

Hello, world, too!

POST

Gossip CREATE

JOHNAPPLE

Hello, world!

What is the name of this item here in Singapore?

by johnapple on 25 Jan 2023, 16:11

0 1

johnapple

Hello, world, too!

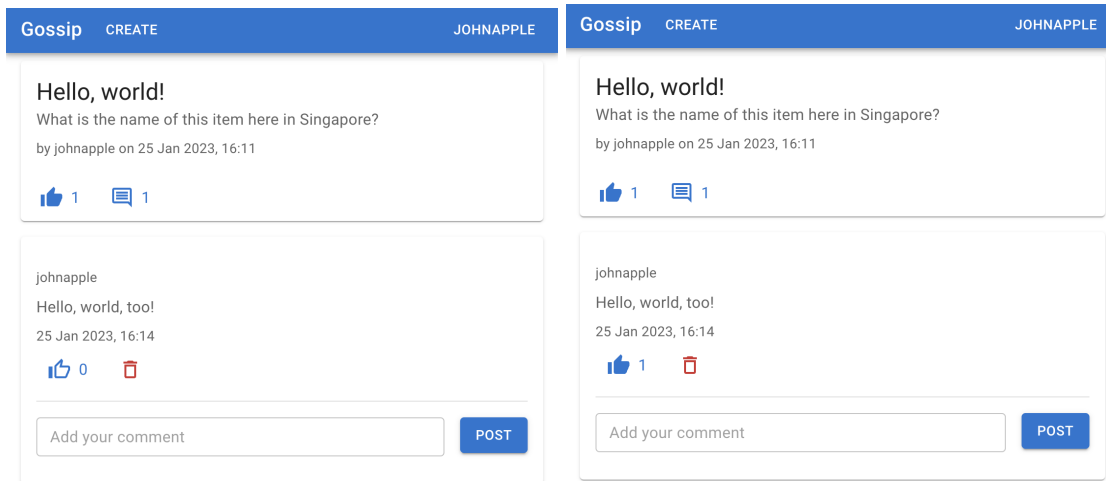
25 Jan 2023, 16:14

0

Add your comment

POST

- Like posts and comments by clicking the like icon on the post or comment.



## Accomplishments

- Deployed to the [Fly platform](#) at [gossip-web.fly.dev](#) and [gossip-api.fly.dev](#), which I have never done before. Learned how to use the command-line interface `flyctl` to deploy, modify and redeploy the cloud services.
- Used Docker to define how to build frontend. Multi-stage Dockerfile using the `node` image to first build the frontend to a static site then a `nginx` image to serve the files when the container is spun up.
- Designed code structure for Go program. Used `cmd` directory to represent executables which then call into the `internal` directory which contains the (HTTP) handler and database code for the business logic.
- Worked with [Material UI](#) library to quickly prototype the user interface with (future) theme and design system capabilities. Worked with [React Query](#) for networking-related code.

## Future Improvements

- Did not manage to develop a lot of the features laid out in my execution plan. This was due to a combination of mismanagement of time and underestimation of the duration to build each feature. A non-exhaustive list of missing features is as follows:
  - Media support (e.g. user avatars, images in posts)
  - Editing of posts and comments
  - Tree-based structure for comments (similar to Reddit; reply to parent comments)
  - Ability to view and manipulate (for privileged users) thread history
  - Allow administrators to add and remove moderators
- Should have done some planning of the user interface design before starting to build the app. Ended up trying to design and build the user interface while figuring out state management which got confusing and complicated quickly.