Deployment

CI/CD Overview

CI/CD Pipeline Workflow

GitHub Action

Commit & Pull Request → Triggers → Run Tests (If provided) → API Request: **Rebuild** → API Request: **Status** → Done

Update from GitHub → Restart Daemon Service

Check Service Status

Server Admin API
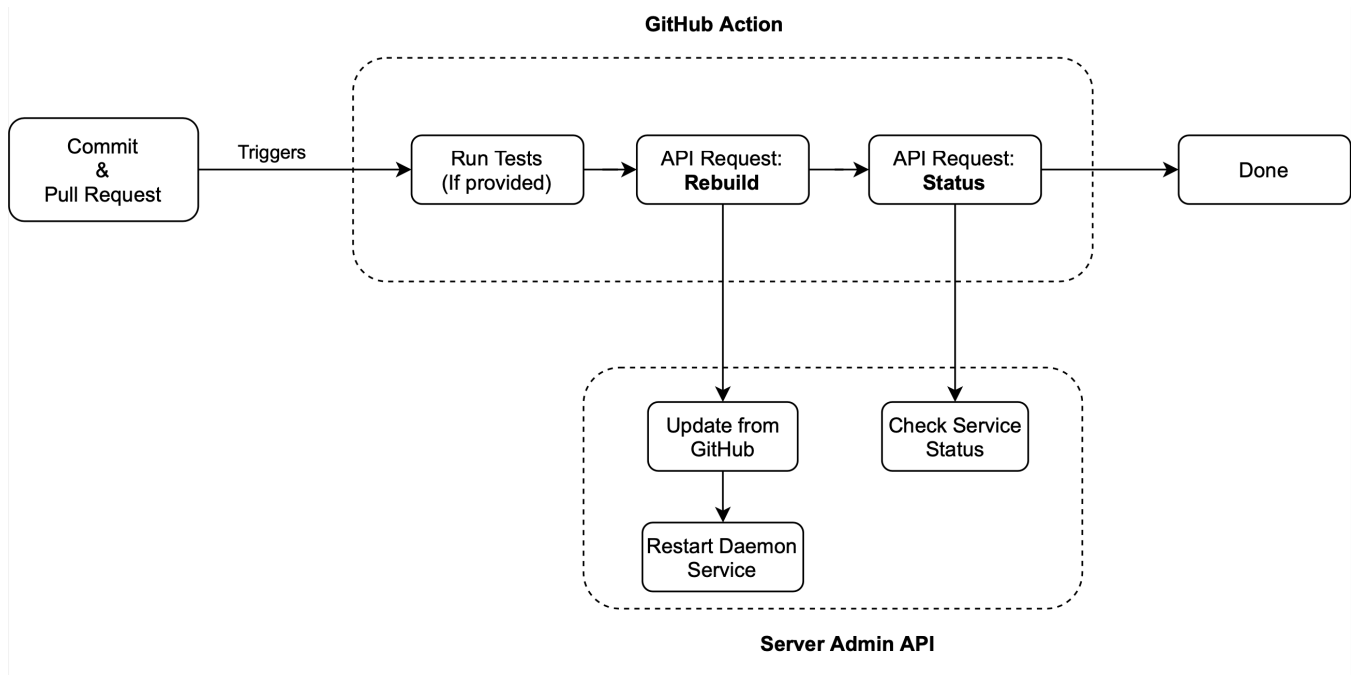
GitHub Actions

GitHub Actions makes it easy to automate all your software workflows, now with world-class CI/CD. Build, test, and deploy your code right from GitHub.

> (i) Currently **the testing step is disabled** due to lack of test cases/procedures, and will be re-enabled if the Backend Team and Frontend Team provides us viable test cases/procedures.

- Documentations: https://docs.github.com/en/actions
- **Actions Script:** node.js.yml

Server CI/CD Admin API

Standalone Restful Style API written in Python & Django. Deployed in Development Instances.

Source code: https://github.com/ccarner/COMP90082-RS-2021/tree/backend/develop/ServerAdminAPI

If you have any question regarding this sub-project, please contact Runfeng Du

> (i) This API is optional and designed solely for deployment and maintenance purposes, and is not part of the main application.

- Backend Status: http://api.cervidae.com.au:8000/rest/info
- Backend Rebuild: http://api.cervidae.com.au:8000/rest/rebuild
- Backend Restart: http://api.cervidae.com.au:8000/rest/restart
- Quick-Check: http://api.cervidae.com.au:8000/rest/check   (0:inactive, 1:active)

Deployment Instructions

ⓘ Make sure you have proper access to the Project GitHub Repo.

Automated Deployment:

one-click-setup.sh

This script will automatically deploy backend server and CI/CD admin API. Frontend deployment is temporary <u>disabled</u> until we finalise the deployment plan.

<u>**Supports Debian/Ubuntu**</u>, requires sudoer privilege.

<u>**Does not support Windows.**</u>

```
wget https://raw.githubusercontent.com/ccarner/COMP90082-RS-2021/backend/develop/one-click-setup.sh && sudo
chmod +x one-click-setup.sh && sudo sh one-click-setup.sh
```

Frontend server (Manual):

1. Clone Repo (**frontend/develop**):

   ```
   git clone git@github.com:ccarner/COMP90082-RS-2021.git && git checkout frontend/develop && cd Front_end
   ```

2. Update dependencies:

   ```
   npm install
   ```

3. Start Dev server:

   ```
   npm start
   ```

Backend server (Manual):

ⓘ If you are from the **Frontend or Database team**, then **DO NOT** set up your own local backend server, instead use our dev server: http://api.cervidae.com.au:4000

1. Clone Repo (**backend/develop**):

   ```
   git clone git@github.com:ccarner/COMP90082-RS-2021.git && git checkout backend/develop && cd backend
   ```

2. Update dependencies:

   ```
   npm install
   ```

3. Start server with log (<u>**Does not support Windows**</u>):

   ```
   ./start.sh
   ```

   Or if you are using **Windows:**

   ```
   npm start
   ```

Development Instances

Backend	
Address	http://**api.cervidae.com.au:4000**
Status	**ACTIVE**
Created	31 Mar 2021
Scheduled Maintenance	☑ None
Git Branch	Backend/Develop
Host provider	Oracle Cloud (Tokyo-1)
Host OS	Ubuntu 20.04.2 LTS
Host Specs	2 CPUs + 1GB RAM (2GB swap)
Node.js Version	v10.19.0
OneClick APIs	**STATUS** **RESTART DAEMON** **REBUILD**
Contact	Runfeng Du

Crash Logs:

f663896	**SOLVED**
Log File	**2021-04-17_15:42:35.backend.log**

Stdout

```
Warning: connect.session() MemoryStore is not
designed for a production environment, as it will leak
memory, and will not scale past a single process.
Listening on port 4000
Connected to mongodb+srv://root:root@cluster0.uhlwx.mongodb.net/myFirstDatabase?retryWrites=true&w=majority..
existed the root account, no need to create
^[*[[Aey.JhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2MDUzMmU4ZDdiYTM1MTRiNTc2ZWJiMjMiLCJfbW9kZXJhdG9yIjp0cnVlLCJfYWRtaW4iOmZhbHNlLCJpYXQiOjE2MTg2MzU5MDl9.rn7OXYMko_P4pV1K0XsUd1UuibEydy0DPtrFhmWaaZY
verifying token
{ _id: '60532e8d7ba3514b576ebb23',
  _moderator: true,
  _admin: false,
  iat: 1618635909 }
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2MDUzMmU4ZDdiYTM1MTRiNTc2ZWJiMjMiLCJfbW9kZXJhdG9yIjp0cnVlLCJfYWRtaW4iOmZhbHNlLCJpYXQiOjE2MTg2MzU5MDl9.rn7OXYMko_P4pV1K0XsUd1UuibEydy0D
PtrFhmWaaZY
verifying token
{ _id: '60532e8d7ba3514b576ebb23',
  _moderator: true,
  _admin: false,
  iat: 1618635909 }
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2MDUzMmU4ZDdiYTM1MTRiNTc2ZWJiMjMiLCJfbW9kZXJhdG9yIjp0cnVlLCJfYWRtaW4iOmZhbHNlLCJpYXQiOjE2MTg2MzU5MDl9.rn7OXYMko_P4pV1K0XsUd1UuibEydy0D
PtrFhmWaaZY
verifying token
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2MDUzMmU4ZDdiYTM1MTRiNTc2ZWJiMjMiLCJfbW9kZXJhdG9yIjp0cnVlLCJfYWRtaW4iOmZhbHNlLCJpYXQiOjE2MTg2MzU5MDl9.ZvdGpAf-GNuTSkAbCgvf-mvOB7SfcrDO
mn_js_7UOrk
verifying token
{ _id: '60532e8d7ba3514b576ebb23',
  _moderator: true,
  _admin: false,
  iat: 1618636497 }
events.js:174
      throw er; // Unhandled 'error' event
      ^

TypeError: Cannot read property '_id' of undefined
    at Subject.getSubjectbyCode (/root/node/backend/controllers/subject.js:89:40)
    at /root/node/backend/node_modules/mongoose/lib/model.js:4870:16
    at /root/node/backend/node_modules/mongoose/lib/model.js:4870:16
    at /root/node/backend/node_modules/mongoose/lib/helpers/promiseOrCallback.js:24:16
    at /root/node/backend/node_modules/mongoose/lib/model.js:4893:21
    at _hooks.execPost (/root/node/backend/node_modules/mongoose/lib/query.js:4400:11)
    at /root/node/backend/node_modules/kareem/index.js:136:16
    at process._tickCallback (internal/process/next_tick.js:61:11)
Emitted 'error' event at:

npm ERR! code ELIFECYCLE
npm ERR! errno 1
npm ERR! SWEN90013_RS01.0.0 start: `node index.js`
npm ERR! Exit status 1
npm ERR!
npm ERR! Failed at the SWEN90013_RS01.0.0 start script.
npm ERR! This is probably not a problem with npm. There is likely additional logging output above.

npm ERR! A complete log of this run can be found in:
npm ERR!     /root/.npm/_logs/2021-04-17T05_15_00_852Z-debug.log


(node:139392) UnhandledPromiseRejectionWarning: TypeError: Cannot read property 'findOne' of undefined
    at Object.exports.getSubjectbyCode (/root/node/backend/proxies/subject.js:67:19)
    at exports.getSubjectbyCode (/root/node/backend/controllers/subject.js:83:13)
    at Layer.handle [as handle_request] (/root/node/backend/node_modules/express/lib/router/layer.js:95:5)
    at next (/root/node/backend/node_modules/express/lib/router/route.js:137:13)
    at module.exports (/root/node/backend/middlewares/auth.js:14:9)
    at Layer.handle [as handle_request] (/root/node/backend/node_modules/express/lib/router/layer.js:95:5)
    at next (/root/node/backend/node_modules/express/lib/router/route.js:137:13)
    at Route.dispatch (/root/node/backend/node_modules/express/lib/router/route.js:112:3)
    at Layer.handle [as handle_request] (/root/node/backend/node_modules/express/lib/router/layer.js:95:5)
    at /root/node/backend/node_modules/express/lib/router/index.js:281:22
    at param (/root/node/backend/node_modules/express/lib/router/index.js:354:14)
    at param (/root/node/backend/node_modules/express/lib/router/index.js:365:14)
    at Function.process_params (/root/node/backend/node_modules/express/lib/router/index.js:410:3)
    at next (/root/node/backend/node_modules/express/lib/router/index.js:275:10)
    at Function.handle (/root/node/backend/node_modules/express/lib/router/index.js:174:3)
    at router (/root/node/backend/node_modules/express/lib/router/index.js:47:12)
(node:139392) UnhandledPromiseRejectionWarning: Unhandled promise rejection. This error originated either by throwing inside of an async function without a catch block, or by rejecti
ng a promise which was not handled with .catch(). (rejection id: 1)
(node:139392) [DEP0018] DeprecationWarning: Unhandled promise rejections are deprecated. In the future, promise rejections that are not handled will terminate the Node.js process wit
h a non-zero exit code.
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2MDUzMmU4ZDdiYTM1MTRiNTc2ZWJiMjMiLCJfbW9kZXJhdG9yIjp0cnVlLCJfYWRtaW4iOmZhbHNlLCJpYXQiOjE2MTg2MzY0OTd9.ZvdGpAf-GNuTSkAbCgvf-mvOB7SfcrDO
mn_js_7UOrk
verifying token
{ _id: '60532e8d7ba3514b576ebb23',
  _moderator: true,
  _admin: false,
  iat: 1618636497 }
TypeError: Cannot read property 'find' of undefined
    at Object.exports.getAllArticles (/root/node/backend/proxies/article.js:103:13)
    at exports.getAllNamesOfTheArticles (/root/node/backend/controllers/article.js:388:13)
    at Layer.handle [as handle_request] (/root/node/backend/node_modules/express/lib/router/layer.js:95:5)
    at next (/root/node/backend/node_modules/express/lib/router/route.js:137:13)
    at exports.verify (/root/node/backend/middlewares/verifyToken.js:21:9)
    at Layer.handle [as handle_request] (/root/node/backend/node_modules/express/lib/router/layer.js:95:5)
    at next (/root/node/backend/node_modules/express/lib/router/route.js:137:13)
    at Route.dispatch (/root/node/backend/node_modules/express/lib/router/route.js:112:3)
    at Layer.handle [as handle_request] (/root/node/backend/node_modules/express/lib/router/layer.js:95:5)
    at /root/node/backend/node_modules/express/lib/router/index.js:281:22
    at param (/root/node/backend/node_modules/express/lib/router/index.js:354:14)
    at param (/root/node/backend/node_modules/express/lib/router/index.js:365:14)
    at Function.process_params (/root/node/backend/node_modules/express/lib/router/index.js:410:3)
    at next (/root/node/backend/node_modules/express/lib/router/index.js:275:10)
    at Function.handle (/root/node/backend/node_modules/express/lib/router/index.js:174:3)
    at router (/root/node/backend/node_modules/express/lib/router/index.js:47:12)
(node:139392) UnhandledPromiseRejectionWarning: TypeError: Cannot read property 'findOne' of undefined
    at Object.exports.getUserHomePage (/root/node/backend/proxies/user.js:75:32)
    at exports.getUserHomePage (/root/node/backend/controllers/user.js:92:10)
    at Layer.handle [as handle_request] (/root/node/backend/node_modules/express/lib/router/layer.js:95:5)
    at next (/root/node/backend/node_modules/express/lib/router/route.js:137:13)
    at module.exports (/root/node/backend/middlewares/auth.js:14:9)
    at Layer.handle [as handle_request] (/root/node/backend/node_modules/express/lib/router/layer.js:95:5)
    at next (/root/node/backend/node_modules/express/lib/router/route.js:137:13)
    at Route.dispatch (/root/node/backend/node_modules/express/lib/router/route.js:112:3)
    at Layer.handle [as handle_request] (/root/node/backend/node_modules/express/lib/router/layer.js:95:5)
    at /root/node/backend/node_modules/express/lib/router/index.js:281:22
    at Function.process_params (/root/node/backend/node_modules/express/lib/router/index.js:335:12)
    at next (/root/node/backend/node_modules/express/lib/router/index.js:275:10)
    at Function.handle (/root/node/backend/node_modules/express/lib/router/index.js:174:3)
    at router (/root/node/backend/node_modules/express/lib/router/index.js:47:12)
    at Layer.handle [as handle_request] (/root/node/backend/node_modules/express/lib/router/layer.js:95:5)
    at trim_prefix (/root/node/backend/node_modules/express/lib/router/index.js:317:13)
(node:139392) UnhandledPromiseRejectionWarning: Unhandled promise rejection. This error originated either by throwing inside of an async function without a catch block, or by rejecti
ng a promise which was not handled with .catch(). (rejection id: 2)
```

6962c79	NOT RESOLVED
Log File	**2021-04-24_05:30:15.backend.log**

Stdout