

13.5. i 14.5.

<https://github.com/aakash-s45/ic?tab=readme-ov-file>

- Postavljanje agl-ove ploce s instrumentima zahtjeva
 - generiranje openroute ključa
 - generiranje jwt tokena za klijenta (ecu kod) pomoću skripte
 - postavljanje testnih certifikata na klijentu
- sve se može automatizirati kroz Dockerfile, osim zahtjevanje openrouteservice api ključa
 - natjecatelji bi trebali napraviti račun ili bi im trebao biti dan API key
 - mogući problemi s prekoracjenjem limita besplatnog ključa
 - <https://openrouteservice.org/plans/>

Uz to, nepraktično je što je za prikaz GUI-ja korisnik mora koristiti neki VNC klijent ili X11 forwarding:

- <https://medium.com/geekculture/run-a-gui-software-inside-a-docker-container-dce61771f9>
- <https://www.baeldung.com/linux/docker-container-gui-applications>

Pokretanje kuksaval servera bez potrebe za postavljanjem SSL certifikata

```
docker run -it --rm -v $HOME/kuksaval.config:/config -p 127.0.0.1:8090:8090 -e LOG_LEVEL=ALL -e KUKSAVAL_OPTARGS="--insecure" ghcr.io/eclipse/kuksa.val/kuksa-val:master
```

Instalacija i pokretanje klijenta:

```
pip install kuksa-client
kuksa-client ws://0.0.0.0:8090
```

Modificiranje vrijednosti:

- klijent

```
Test Client> authorize ../agl-ic-compose/agl-ic/super-admin.json.token
{
  "TTL": 1767225599,
  "action": "authorize",
  "requestId": "2b6a389b-20c7-4064-bb06-f7e5017d12ec",
  "ts": "2024-05-21T15:58:35.1716307115Z"
}

Test Client> updateVSTree agl-ic/steering_switch_signal.json
{
  "action": "updateVSTree",
  "requestId": "4d554915-ea00-48be-adbb-c2c1617b0885",
  "ts": "2024-05-21T15:58:58.1716307138Z"
}

Test Client> setValue Vehicle.Speed 20
{
  "action": "set",
  "requestId": "d94e883e-5e46-46c6-a3cc-6b974f1cb7a1",
  "ts": "2024-05-21T16:11:27.1716307887Z"
}
```

- server

```

VERBOSE: Receive action: updateVSSTree
VERBOSE: VssCommandProcessor::processUpdateVSSTree
VERBOSE: Receive action: getMetaData
VERBOSE: VssDatabase::getMetaData: VSS specific path =['Vehicle']
VERBOSE: Receive action: set
VERBOSE: Set request with id d94e883e-5e46-46c6-a3cc-6b974f1cb7a1 for path: Vehicle.Speed with attribute:
value
VERBOSE: SubscriptionHandler::publishForVSSPath: set value 20.0 for path Vehicle.Speed

```

potrebno je stvoriti token na <https://openrouteservice.org/dev>

error kod pokretanja flutter aplikacije:

```

> flutter run
Launching lib/main.dart on Linux in debug mode...
ERROR: ../../../../../../.pub-cache/hosted/pub.dev/flutter_map-
2.2.0/lib/src/layer/tile_layer/tile_provider/network_no_retry_image_provider.dart:30:5: Error: Type
'DecoderCallback' not found.
ERROR:      DecoderCallback decode,
ERROR:      ^^^^^^^^^^^^^^^^^
ERROR: ../../../../../../.pub-cache/hosted/pub.dev/flutter_map-
2.2.0/lib/src/layer/tile_layer/tile_provider/network_no_retry_image_provider.dart:56:14: Error: Type
'DecoderCallback' not found.
ERROR:      required DecoderCallback decode,
ERROR:      ^^^^^^^^^^^^^^^^^
ERROR: ../../../../../../.pub-cache/hosted/pub.dev/flutter_map-
2.2.0/lib/src/layer/tile_layer/tile_provider/network_no_retry_image_provider.dart:30:5: Error:
'DecoderCallback' isn't a type.
ERROR:      DecoderCallback decode,
ERROR:      ^^^^^^^^^^^^^^^^^
ERROR: ../../../../../../.pub-cache/hosted/pub.dev/flutter_map-
2.2.0/lib/src/layer/tile_layer/tile_provider/network_no_retry_image_provider.dart:56:14: Error:
'DecoderCallback' isn't a type.
ERROR:      required DecoderCallback decode,
ERROR:      ^^^^^^^^^^^^^^^^^
ERROR: ../../../../../../.pub-cache/hosted/pub.dev/flutter_map-
2.2.0/lib/src/layer/tile_layer/tile_provider/network_image_provider.dart:24:35: Error: Type
'DecoderCallback' not found.
ERROR:      FMNetworkImageProvider key, DecoderCallback decode) {
ERROR:      ^^^^^^^^^^^^^^^^^
ERROR: ../../../../../../.pub-cache/hosted/pub.dev/flutter_map-
2.2.0/lib/src/layer/tile_layer/tile_provider/network_image_provider.dart:39:5: Error: Type
'DecoderCallback' not found.
ERROR:      DecoderCallback decode,
ERROR:      ^^^^^^^^^^^^^^^^^
ERROR: ../../../../../../.pub-cache/hosted/pub.dev/flutter_map-
2.2.0/lib/src/layer/tile_layer/tile_provider/network_image_provider.dart:24:35: Error: 'DecoderCallback'
isn't a type.
ERROR:      FMNetworkImageProvider key, DecoderCallback decode) {
ERROR:      ^^^^^^^^^^^^^^^^^
ERROR: ../../../../../../.pub-cache/hosted/pub.dev/flutter_map-
2.2.0/lib/src/layer/tile_layer/tile_provider/network_image_provider.dart:39:5: Error: 'DecoderCallback'
isn't a type.
ERROR:      DecoderCallback decode,

```

```

ERROR:      ^^^^^^^^^^^^^^^^^
ERROR: ../../../../../../.pub-cache/hosted/pub.dev/flutter_map-
2.2.0/lib/src/layer/tile_layer/tile_builder.dart:98:48: Error: The getter 'headline5' isn't defined for
the class 'TextTheme'.
ERROR: - 'TextTheme' is from 'package:flutter/src/material/text_theme.dart'
('../../../../../../../../development/flutter/packages/flutter/lib/src/material/text_theme.dart').
ERROR: Try correcting the name to the name of an existing getter, or defining a getter or field named
'headline5'.
ERROR:          style: Theme.of(context).textTheme.headline5,
ERROR:          ^^^^^^^^^
ERROR: ../../../../../../.pub-cache/hosted/pub.dev/flutter_map-
2.2.0/lib/src/layer/tile_layer/tile_builder.dart:130:48: Error: The getter 'headline5' isn't defined for
the class 'TextTheme'.
ERROR: - 'TextTheme' is from 'package:flutter/src/material/text_theme.dart'
('../../../../../../../../development/flutter/packages/flutter/lib/src/material/text_theme.dart').
ERROR: Try correcting the name to the name of an existing getter, or defining a getter or field named
'headline5'.
ERROR:          style: Theme.of(context).textTheme.headline5,
ERROR:          ^^^^^^^^^
ERROR: Target kernel_snapshot failed: Exception
Building Linux application...
Error: Build process failed

```

Pokusao

- promijeniti verziju java koja je bila konfliktna s verzijom gradlea ali nije rjesilo problem
- instalirao verziju fluttera koja koristi dart >= 2.17.0 i < 3.0.0 prema yamlu u repozitoriju, novi error:

```

> flutter run
Launching lib/main.dart on Linux in debug mode...
CMake Error at cmake_install.cmake:112 (file):
  file INSTALL cannot find
  "/home/lgm/fer/diplomski/rad/kod/vanjski_repozitoriji/agl-ic-compose/ic/build/native_assets/linux":
  No such file or directory.

Building Linux application...
Exception: Build process failed
> flutter doctor

```

Razlog:

- <https://docs.flutter.dev/get-started/install/linux/desktop?tab=download>

Flutter supports Debian Linux 11 or later and Ubuntu Linux 20.04 LTS or later .

Dockerizirati?

<https://github.com/luccasmaso/docker-flutter-desktop>

20.5.

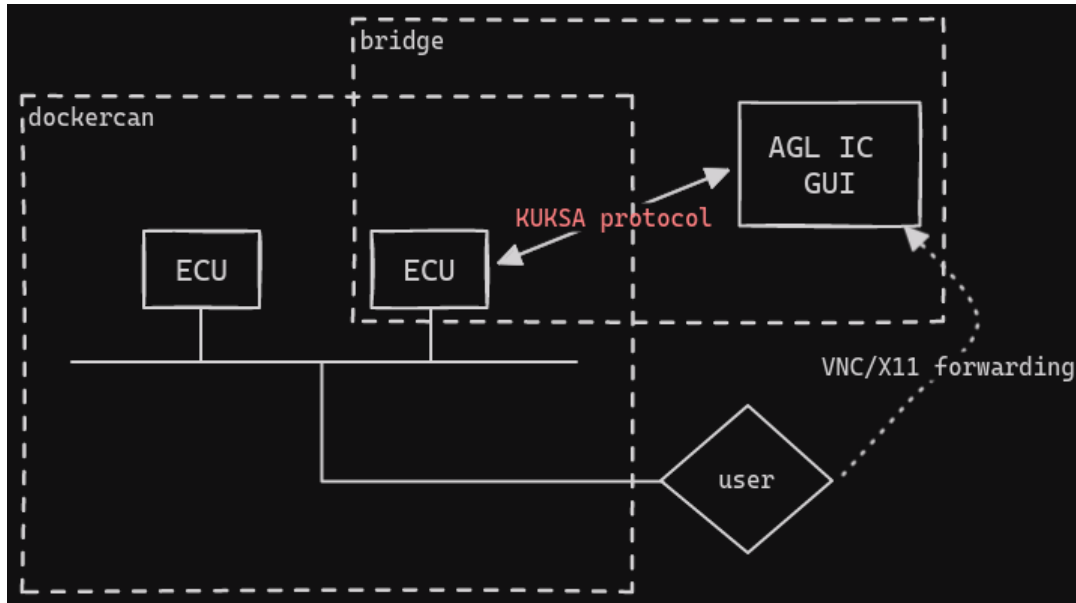
nedoumice tijekom programiranja

- observer
 - <https://stackoverflow.com/questions/26517856/java-and-gui-where-do-actionlisteners-belong-according-to-mvc-pattern>
 - <https://softwareengineering.stackexchange.com/questions/378748/whats-the-difference-between-observer-pattern-and-listeners>

Dodan predolazak za listenere

21.5.

dijagram za ACL GUI

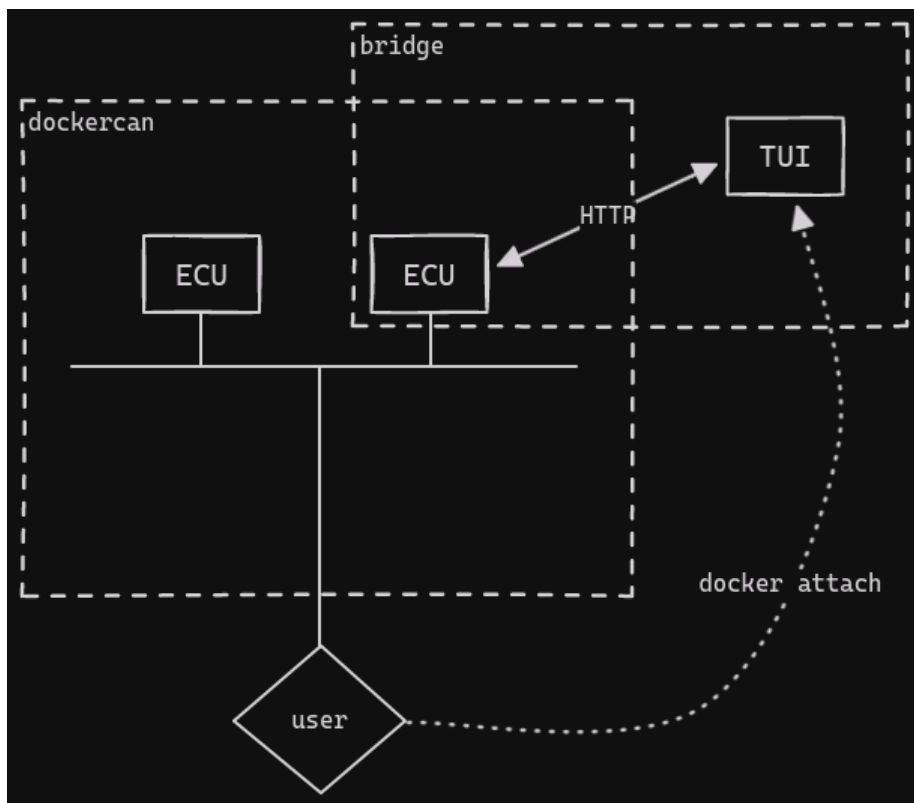


Mozda bi praktičnije za pokretanje svega s docker composeom, bilo napraviti jednostavan TUI (Terminal UI) koji se može prikazivati docker attachom na ecu kontejnera.

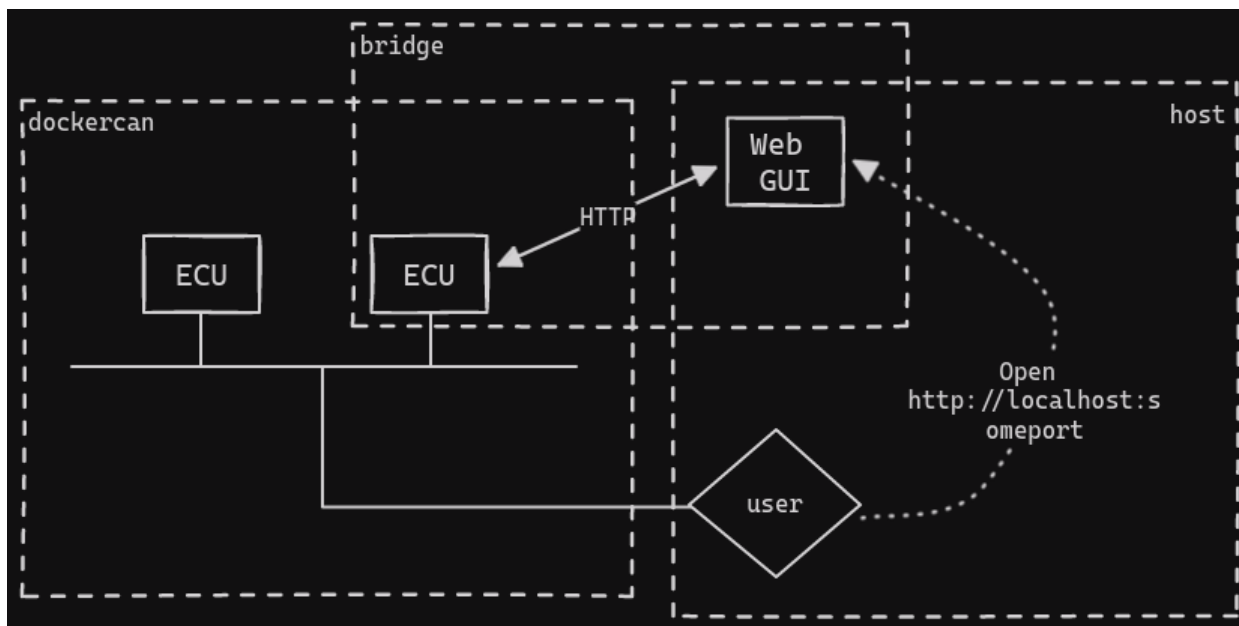
neke biblioteke

- python
 - <https://github.com/Textualize/textual>
 - malo prekompleksno za ovu potrebu
 - <https://rich.readthedocs.io/en/latest/>
 - <https://github.com/tqdm/tqdm>
- golang
 - <https://github.com/gizak/termui>
 - možda najprikladniji,
 - korištenje gaugeova za brzinu
 - text box za prikaz zastavica i ostalih lampica
 - redis za spremanje i azuriranje svih vrijednosti iz ecu-a
 - <https://github.com/JoelOtter/termloop?tab=readme-ov-file>

u svakom slučaju, TUI treba biti u zasebnom containeru kako ga natjecatelj ne bi mogao prozovoljno ugasiti



Treća opcija je izraditi jednostavnu web ploču s instrumentima (twojs i websocketi?):



alternative AGL IC-u

<https://github.com/Mathews2115/TeslondaDash>

<https://github.com/jschulberger/capstone-dashboard-docker/tree/master>