Lampiran B. *Log Activity*

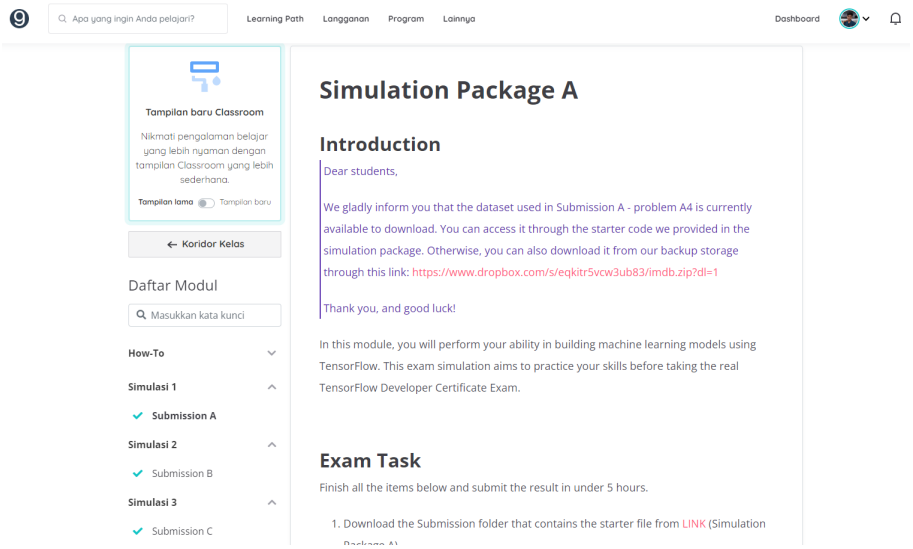
Tabel 6.1 Aktivitas Bangkit Academy 2022

Minggu/Tgl	Kegiatan	Hasil
0/7 Feb 2022	English Pre-test & Matrikulasi	Lolos
1/14 Feb 2022	Dicoding Python Course	Lolos
2/21 Feb 2022	IT Automation with Python (Course 1 & 2)	Lolos
3/28 Feb 2022	ILT *soft skills* 1 & IT Automation with Python (Course 3 & 4)	Lolos
4/07 Mar 2022	Assignment SS 1 & English - 1 & IT Automation with Python (Course 5 & 6)	Lolos
5/14 Mar 2022	ILT *soft skills* 2 & Mathematics for Machine Learning (Course 1 & 2)	Lolos
6/21 Mar 2022	Assignment SS 2 & Mathematics for Machine Learning (Course 3)	Lolos
7/28 Mar 2022	ILT *soft skills* 3 & TF Developer Professional Certificate (Course 1 & 2)	Lolos
8/04 Apr 2022	Assignment SS 3 & English - 2 & TF Developer Professional Certificate (Course 3 & 4)	Lolos
9/11 Apr 2022	ILT *soft skills* 4 & Structuring Machine Learning Project & TF Data and Deployment (Browser-based Model)	Lolos
10/18 Apr 2022	Assignment SS 4 & TF Data and Deployment (Device-based Model)	Lolos
11/25 Apr 2022	ILT *soft skills* 5 & Assignment SS 5 & TF Data and Deployment (Data Pipelines & Advanced Deployment Scenarios)	Lolos
12/09 May 2022	*CAPSTONE PROJECT* (Capfits – Capture Your Outfits)	Lolos

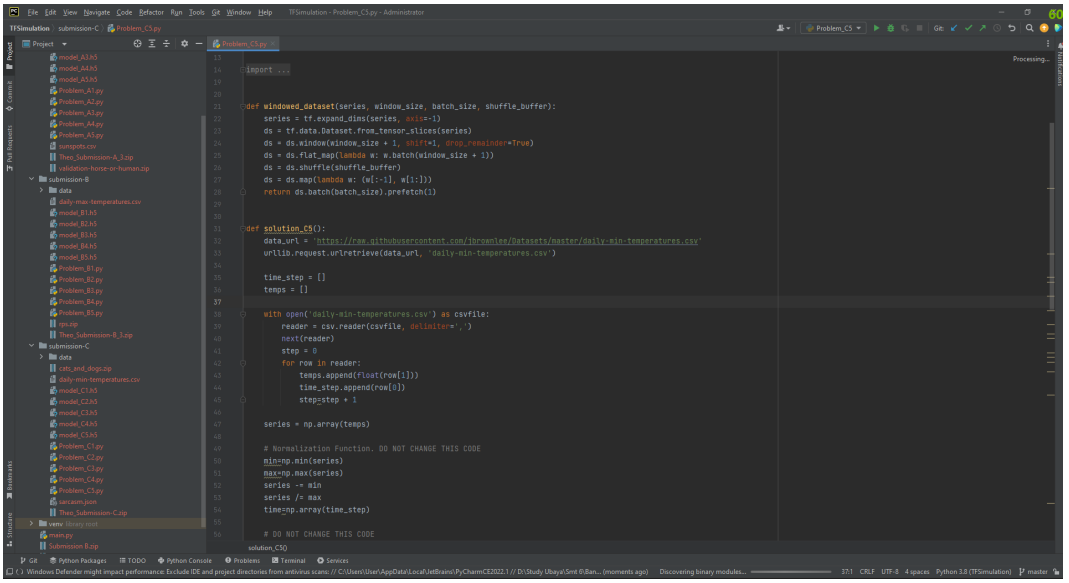
13/16 May 2022	English-3 & *CAPSTONE PROJECT* (Capfits – Capture Your Outfits)	Lolos
14/23 May 2022	*CAPSTONE PROJECT* (Capfits – Capture Your Outfits)	Lolos
15/30 May 2022	*CAPSTONE PROJECT* (Capfits – Capture Your Outfits)	Lolos
16/06 Jun 2022	*CAPSTONE PROJECT* (Capfits – Capture Your Outfits)	Lolos
17/13 Jun 2022	*CAPSTONE PROJECT* (Capfits – Capture Your Outfits)	Lolos
18/20 Jun 2022	ILT *soft skills* 6 & English Post-test & TensorFlow Certification Preparation (Dicoding Platform Simulation)	Lolos
19/27 Jun 2022	Laporan Akhir MSIB Bangkit Academy 2022 Machine Learning Path	Lolos
20/04 Jul 2022	ILT *soft skills* 7 & Expert Classes	Mendatang
21/11 Jul 2022	*End of Learning, Certification Offering, Merchandise*	Mendatang
22/18 Jul 2022	*Transcript & Administration*	Mendatang
END/25 Jul 2022	*Clarification, Legal & Letters, Closing*	Mendatang

Lampiran C. Dokumen Teknik

1. Dicoding *Submission*

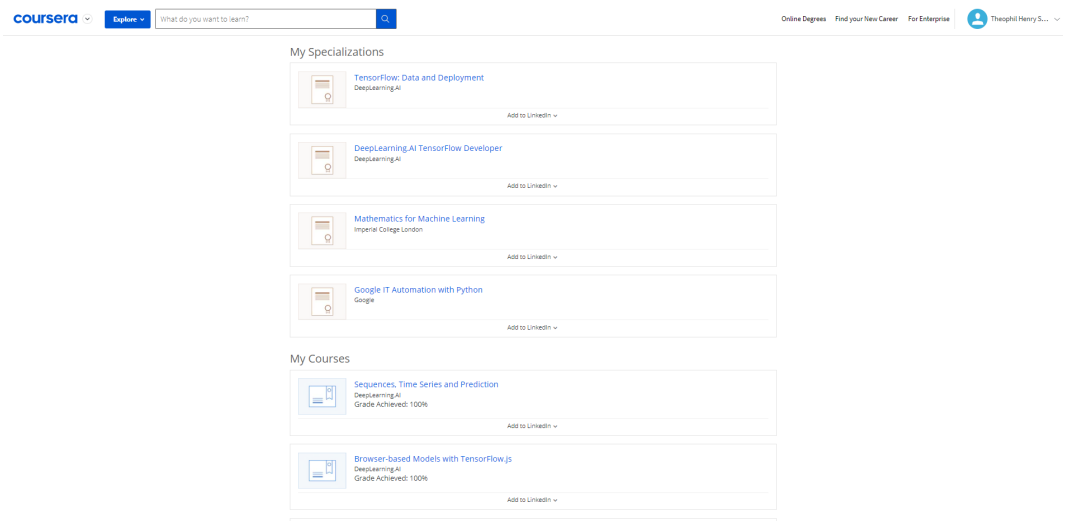


Gambar 5.1 Tugas Simulasi untuk Tensorflow Developer Certification



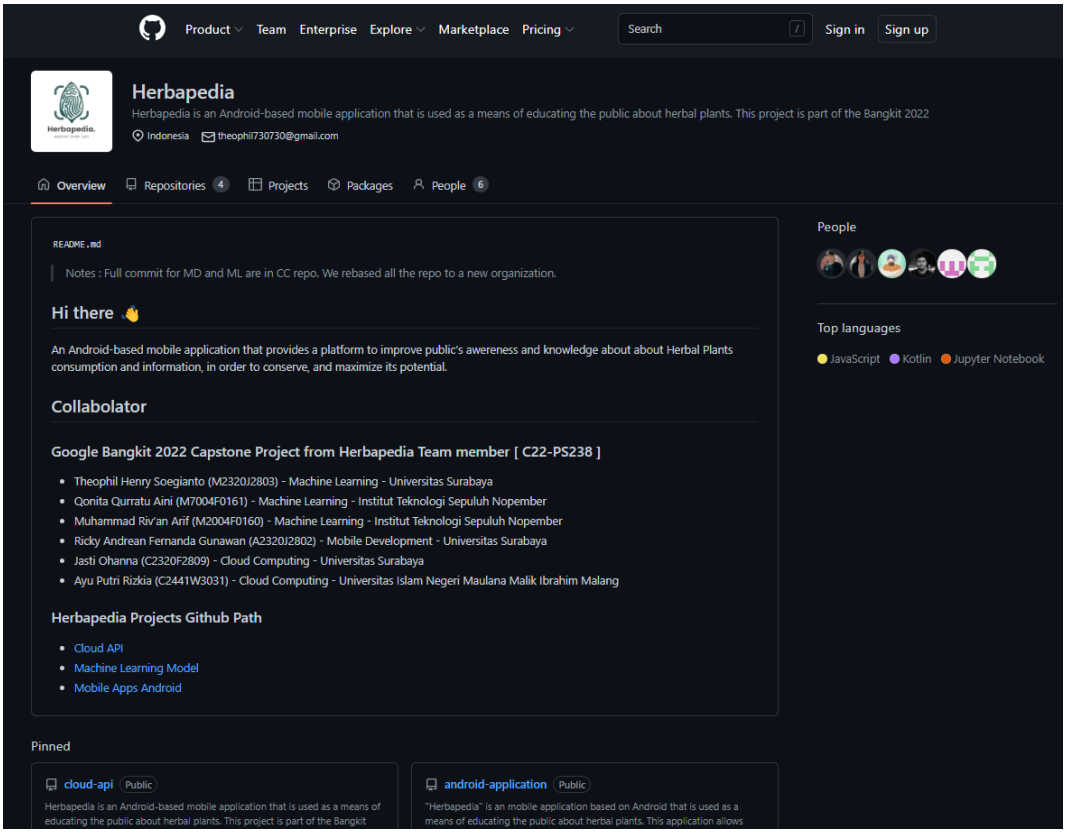
Gambar 5.2 Hasil *Code* Tugas Simulasi Tensorflow Developer Certification

2. Coursera *Certificates*



Gambar 5.3 Hasil Sertifikat di Coursera

3. *Capstone Project* GitHub



Gambar 5.4 Hasil *Repository Capstone* Herbapedia

4. *Capstone Project Architecture*

```
  base_model.trainable = False
  return base_model

base_model = CreateBaseModel(INPUT_SHAPE)
```

In [9]:

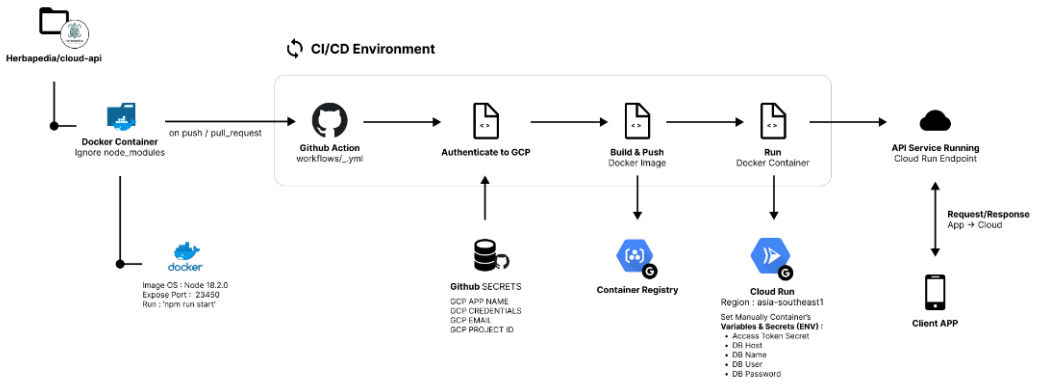
```
# Functional API for Keras Model Building

def CreateFinalModel(base_model, input_shape, num_of_plants):
  inputs = keras.Input(shape=input_shape)

  # Base Model Instantiation
  x = base_model(inputs, training=False)

  # Custom DNN Model
  x = keras.layers.GlobalAveragePooling2D()(x)
  x = keras.layers.Dense(640, activation='relu')(x)
  x = keras.layers.Dropout(0.6)(x)
  x = keras.layers.Dense(320, activation='relu')(x)
  x = keras.layers.Dropout(0.2)(x)

  outputs = keras.layers.Dense(num_of_plants, activation='softmax')(x)

  final_model = keras.Model(inputs, outputs)
  return final_model

final_model = CreateFinalModel(base_model, INPUT_SHAPE, NUM_OF_PLANTS)
final_model.summary()
```

```
Model: "model"
_________________________________________________________________
 Layer (type)                Output Shape              Param #
=================================================================
 input_2 (InputLayer)        [(None, 384, 384, 3)]     0

 efficientnetv2-s (Functiona  (None, 12, 12, 1280)     20331360
 l)

 global_average_pooling2d (G  (None, 1280)             0
 lobalAveragePooling2D)

 dense (Dense)               (None, 640)               819840

 dropout (Dropout)           (None, 640)               0

 dense_1 (Dense)             (None, 320)               205120

 dropout_1 (Dropout)         (None, 320)               0

 dense_2 (Dense)             (None, 18)                5778

=================================================================
Total params: 21,362,098
Trainable params: 1,030,738
Non-trainable params: 20,331,360
_________________________________________________________________
```

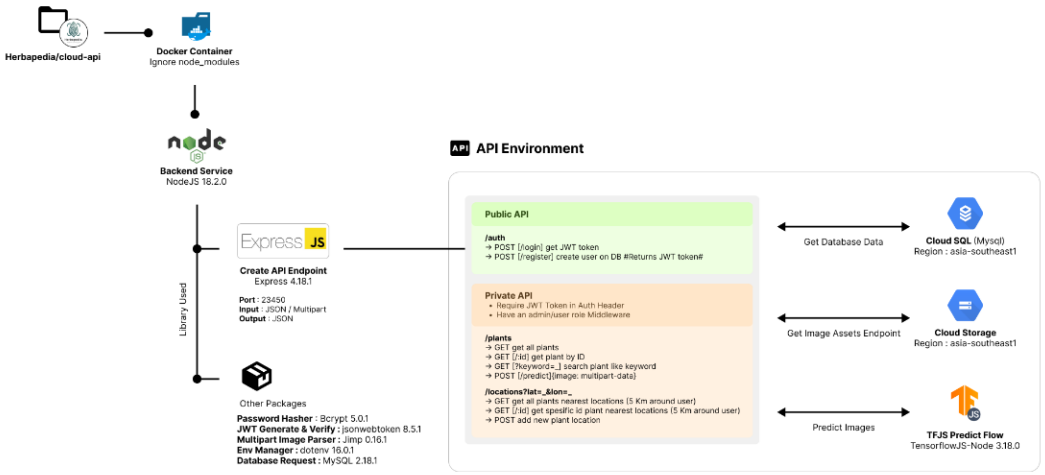
In [10]:

```
LR = 1e-4

final_model.compile(optimizer = keras.optimizers.Adam(learning_rate=LR),
```

Gambar 5.5 Model Pengenalan Tanaman Herbapedia

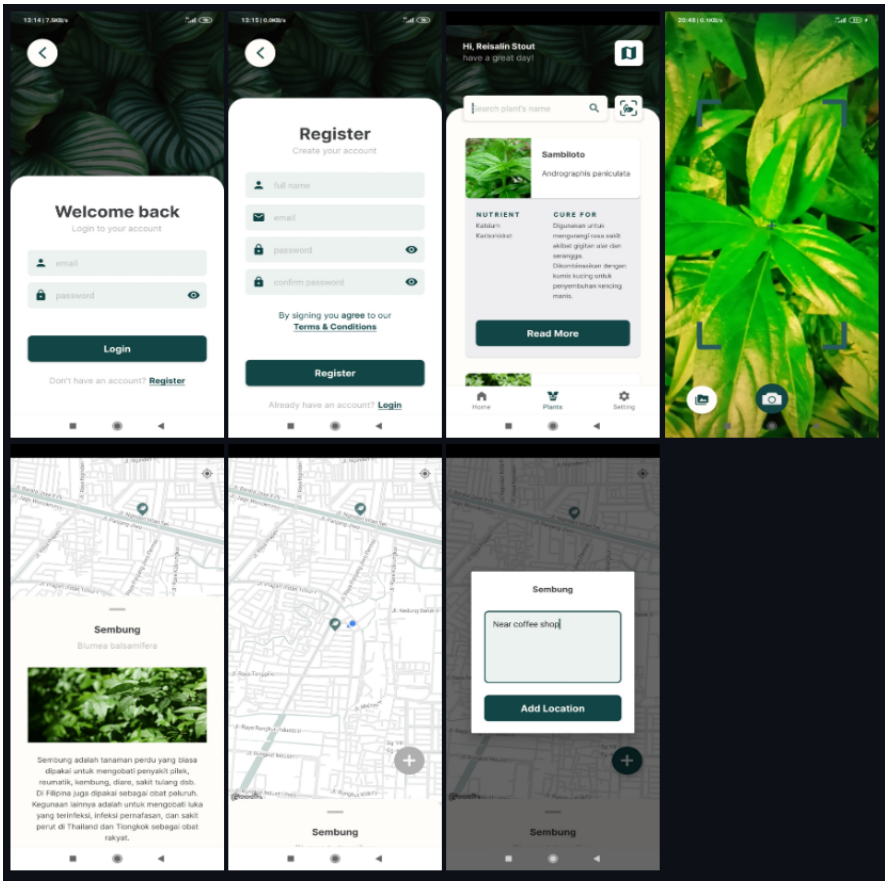


Gambar 5.6 Model CI/CD *Cloud* Herbapedia



Gambar 5.7 Model API *Cloud* Herbapedia

5. *Capstone Project Android Application*



Gambar 5.8 Hasil Aplikasi Android *Capstone Project*