

Working doc for mentoring

(for students to fill up and send to mentor
altogether with the calendar invitation)

C22-PC383

Project Name: Wacayang, Indonesian Wayang Kulit Characters Detection App

Project Themes: Tourism, Creative, and Digital Economy

Project Team Members:

- Fahrizza Irham Taufany (M2116L1465) - Machine Learning - Institut Teknologi Kalimantan
- Muhammad Izzah Alfatih (M2012F1299) - Machine Learning - Universitas Telkom
- Nauval Muhammad Firdaus (A2005F0453) - Mobile Development - Universitas Bina Nusantara
- Dimas Aji Permadi (C2152F1678) - Cloud Computing - Sekolah Tinggi Teknologi Bandung

Project Mentors:

- R. Achmad Dadang Nur Hidayanto
Lead DevSecOps Engineer at Directorate General of Taxes, Ministry of Finance RI
- Agung Gunawan
Sr. ICT System Infra at Smartfren Telecom

Documents:

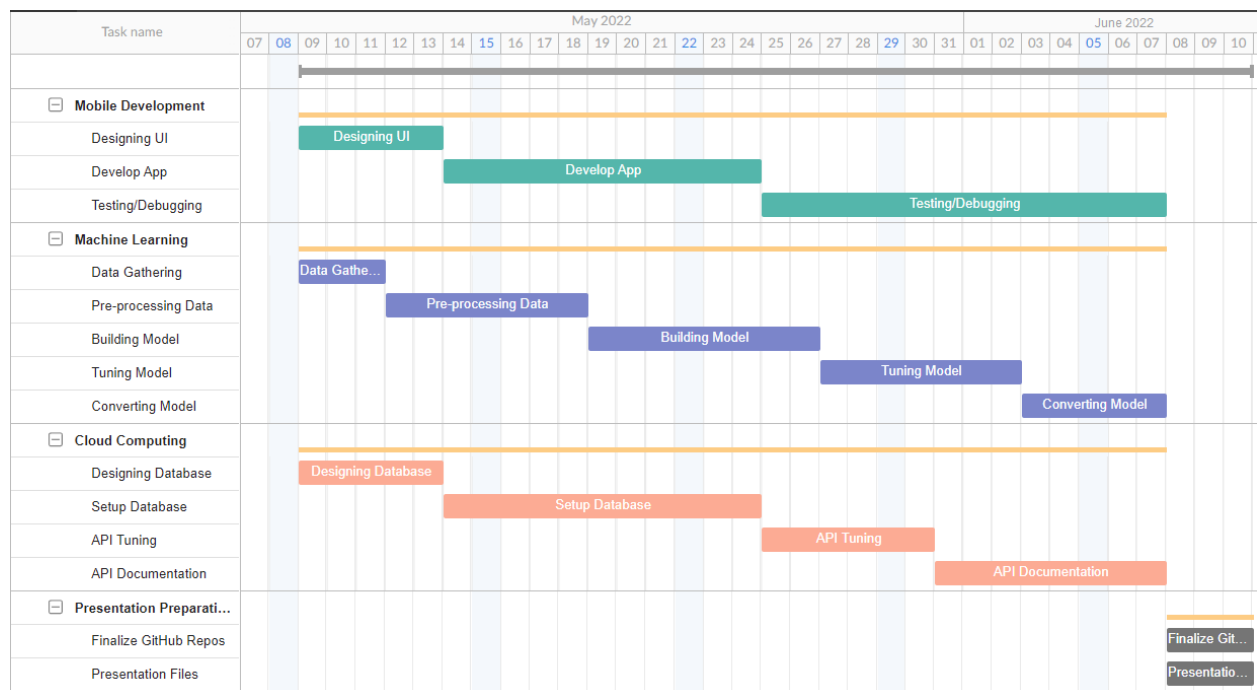
- Project Plan/Design Documents:
<https://drive.google.com/open?id=1Q4cD2YyzyvxsgzzgNP8UeA4twsh-2Z4>
 - Bangkit Team Remark: OK
- Project Git Repository: <https://github.com/Wacayang-Bangkit-2022>
- Other resources:
 - Wireframe and Mock-up: <https://www.figma.com/file/JG7eT6Ri8gWlf9kObcldGp/Wacayang>

Decision logs:

- Project Decision Logs Document:
<https://docs.google.com/document/d/1SINhbctVoL3IDE64kNePDtBMIXiuMH1MN1-n8YLihNA/edit?usp=sharing>

Timeline:

Week 1 : 9-14 May 2022
 Week 2 : 16-21 May 2022
 Week 3 : 23-28 May 2022
 Week 4 : 30 May-4 June 2022
 Week 5 : 6-10 June 2022
 Working Days : Monday-Saturday (29 Days)



Other notes

(None)

1:1 Mentoring Session with R. Achmad Dadang Nur Hidayanto

*please copy this for each mentoring session

- Date: Friday, 27 May 2022 (8:00 PM - 9:00 PM)
- Participants:
 - Fahrizza Irham Taufany (M2116L1465) - Machine Learning - Institut Teknologi Kalimantan
 - Muhammad Izzah Alfatih (M2012F1299) - Machine Learning - Universitas Telkom
 - Nauval Muhammad Firdaus (A2005F0453) - Mobile Development - Universitas Bina Nusantara
 - Dimas Aji Permadi (C2152F1678) - Cloud Computing - Sekolah Tinggi Teknologi Bandung
- Mentor:
R. Achmad Dadang Nur Hidayanto (B22M-091) - Lead DevSecOps Engineer at Directorate General of Taxes, Ministry of Finance RI
- Mentor expertise: Software Engineer
- Resources:
 - Project Tasks: <https://trello.com/b/NkNOHVQo/wacayang-bangkit-2022>
 - Video Recording (might need to be downloaded to view):
https://drive.google.com/file/d/1F_ohnnl-DeyniSx32DenAK26LQ2_VTbn/view?usp=sharing

Short introductions and expectation setting [15 min]

- Introduction of The Project
Wacayang is a mobile application that is able to identify Indonesian wayang kulit characters. We will use images uploaded by the user as input, and the information about the name, description, image, and related video about the identified wayang character will be displayed on the app.
- Expectation Setting
An early working app that satisfies the basic requirements, including sign in, loading data, and capturing an image of wayang to detect which wayang character is it.

Team Challenges & Questions

- How to make user sign in flow to the app easier by using Google Account or as a guest? (MD)
- How to deploy API services and ML models to Google Cloud Platform as REST API? (CC)
- How to authenticate user access for getting or posting data based on their authorization? (CC)
- How to build a model with high accuracy, minimum loss, and can predict images correctly? (ML)
- What kind of feature can be added for the Wacayang mobile app? (MD)

Action Item & Next Steps

- Implement user sign in with JWT token provided by Firebase services. (MD)
- Polish the UI and UX, make sure every layout displays the correct data when certain network requests fail or succeed. (MD)
- Use Google Cloud Run as a platform to deploy API service. For basic API, use Node.js and Express. For ML model deployment as API, use Flask and Python. (CC)
- Use Firebase Admin SDK to verify JWT token each time there is a service request. (CC)
- Use transfer learning. (ML)
- Create user wayang upload history and comment sections. (MD)

1:1 Mentoring Session with Agung Gunawan

*please copy this for each mentoring session

- Date: Saturday, 28 May 2022 (8:30 PM - 9:20 PM)
- Participants:
 - Fahrizza Irham Taufany (M2116L1465) - Machine Learning - Institut Teknologi Kalimantan
 - Muhammad Izzah Alfatih (M2012F1299) - Machine Learning - Universitas Telkom
 - Nauval Muhammad Firdaus (A2005F0453) - Mobile Development - Universitas Bina Nusantara
 - Dimas Aji Permadi (C2152F1678) - Cloud Computing - Sekolah Tinggi Teknologi Bandung
- Mentor: Agung Gunawan (B22M-106) - Sr. ICT System Infra at Smartfren Telecom
- Mentor expertise: Cloud Computing
- Resources:
 - Project Tasks: <https://trello.com/b/NkNOHVQo/wacayang-bangkit-2022>
 - Video Recording (might need to be downloaded to view):
https://drive.google.com/file/d/1xt7-AmJrJ0HxQZj9h2CdHENx3S7L_Nf9/view?usp=sharing

Short introductions and expectation setting [15 min]

- Introduction of The Project
Wacayang is a mobile application that is able to identify Indonesian wayang kulit characters. We will use images uploaded by the user as input, and the information about the name, description, image, and related video about the identified wayang character will be displayed on the app.
- Expectation Setting
A working app that satisfies the basic requirements and improved cloud services security, including access to sign in, loading data, and capturing an image of wayang to detect which wayang character is it.

Team Challenges & Questions

- What is the alternative way to authenticate users login besides using JWT token header? (MD)
- How can images uploaded to Cloud Run be saved on Google Storage bucket? (CC)
- How to build a model with high accuracy, minimum loss, and can predict images correctly? (ML)

Action Item & Next Steps

- Keep using JWT token because it is best-practice (MD, CC)
- Store uploaded images from user to Google Storage bucket as dataset. (MD, CC)
- Collect input data from users and use it to expand the dataset. (ML)