



Hi, friends!
I'm *Midi* from
MiKids!

MiKids

Mitigation game for kids

A mobile apps-based game about disaster risk reduction (DRR) for early childhood (7-8 years old).

si Midi

BACKGROUND

Children are a vulnerable group to disaster

Therefore, educating them must be the priority

Educational game can boost their understanding

So that, they will be an agent of change in the future



Flood prevention game as an example

2



3

Get to know the neighbourhood's game

1 The game's menu consist of disaster classification

SHORT BIO

- The team was first met at a student union namely "Young Researcher Community" at Universitas Negeri Jakarta
- The idea about DRR for early childhood was generated from scientific paper which has been successfully accepted at National Student Scientific Week (PIMNAS) at Gadjah Mada University in 2020

• Wulan Azahra Khairunisa

- Alumni of Geography Education Department
- Universitas Negeri Jakarta

• Dwi Nurfitria Bella

- Alumni of Early Childhood Education Department
- Universitas Negeri Jakarta

• Adi Rahman

- Computer Science student
- Universitas Negeri Jakarta



NUSANTARA FLOOD?



inaRISK

NUSAFLOOD IS THE EXPERT



Nusantara Analysis Flood (NUSAFLOOD)

What's new?

- NUSAFLOOD is a website that functions in analyzing the impact of 3 aspects (agriculture, urban, population) affected by flooding.
- Users can find out and experiment in visualizing flood-affected areas of an area.

Inspiration

The rise of floods that occurred in Indonesia. Especially the flooding in NTT due to the influence of Tropical Cyclone Seroja in early April 2021.



Technology

- Cloud Computing
Combination of computing in an internet-based network.



JavaScript



Satellite Image

- Sentinel-1 SAR GRD: C-band SAR GRD
- MCD12Q1.006 MODIS Land Cover
- JPOPULASI JRC Global Surface Water Mapping Layers v1.3

Let's Access NUSAFLOOD!

The results of the work on the NUSAFLOOD Web

Web Usage Demo Video



qrco.de/NUSAFLOODbyALLUVIONE



qrco.de/demowebNUSAFLOOD

ALLUVIONE

Undergraduate Student of the Department of Geography, Faculty of Mathematics and Natural Sciences, University of Indonesia



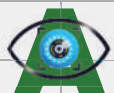
Andini Tia Sachi

"Let's Mitigate Flood!"

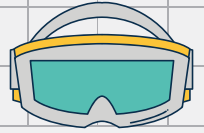
REFERENCE

- UN SPIDER. Step-by-Step: Recommended Practice: Flood Mapping and Damage Assessment using Sentinel-1 SAR data in Google Earth Engine. Diakses melalui <https://un-spider.org/advisory-support/recommended-practices/recommended-practice-google-earth-engine-flood-mapping/step-by-step>





AURIGA! [AUGMENTED REALITY TSUNAMI]



Your Tsunami Guider

Meet The Team!

Lukman Fadlansyah R

Student of Geodesy and Geomatics Engineering ITB

From the "Map" character in the "Dora the Explorer" series, Lukman knows that maps can take him anywhere, to places he never imagined before. Moving on from here, he decided to study Geodesy Engineering and Geomatics in college. Currently, he is exploring the development and application of GIS science and technology, Remote Sensing, and other survey methods to solve the problems that occur around him. He is also quite active in the English debate club on campus.

email : lfrfr31@gmail.com

Teresa Amalia Purba

Student of Geodesy and Geomatics Engineering ITB

Teresa has an interest in the development of GIS technology and IoT-based spatial data processing. One of the works ever made in the form of mobile apps and web app G-SIS. In addition, her interest is in the form of public speaking and participating in several competitions, both national and international levels. During her time as a student of Geodesy and Geomatics Engineering, Teresa was also quite active in writing scientific papers.

email : teresamaliap@gmail.com

Zola Saputra

Student of Geodesy and Geomatics Engineering ITB

Zola has an interest in implementing spatial data in solving problems that exist in society. Zola already has several works such as Panagami, a Tsunami Disaster mitigation platform in Pangandaran Village. In addition, Zola is interested in community empowerment where he was in charge of the 2021 People's Angklung Concert and took care of the 2021 Geodesy Activities to the Community (GEMAS).

email : zolasaputra26@gmail.com

Background

InaRISK is one of the portals containing the study of disaster risk areas using spatial data processing technology. The existence of the portal supports digital solutions for strengthening and education on tsunami risk reduction in the Pangandaran coastal area. To increase effectiveness and simplify the use of InaRISK, the ODADING Team offers a digital solution called AURIGA (AR for Tsunami Mitigation). AURIGA is a digital solution in the form of Augmented Reality based on an Artificial Intelligence (AI) framework to help mitigate and evacuate tsunamis on the Pangandaran coast. AI will be used to select the closest route from the location of the AURIGA user to a safe shelter location, and display the distance and travel time to the user. Meanwhile, AR serves to retrieve markers for the nearest shelter or meeting point, the evacuation route that must be followed from the user's current location to the shelter in 3D, as well as the value of the immersion height during a tsunami.

Criteria

Programming Language : C#

Data Processing Software:

- ✓ ArcGIS
- ✓ MapBox
- ✓ UNITY

Data Used:

- ✓ Pangandaran Coastal Spatial Data
- ✓ Tsunami Inundation Data

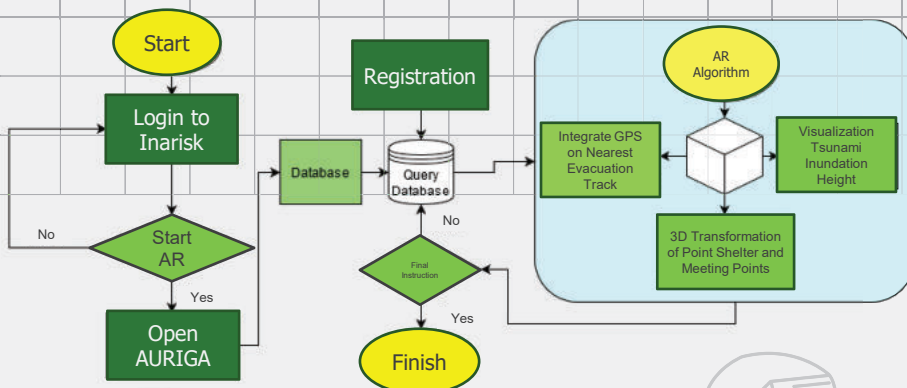
Fitur AR

- ✓ Point Shelter
- ✓ Evacuation Route
- ✓ Tsunami Inundation Height
- ✓ Region Map

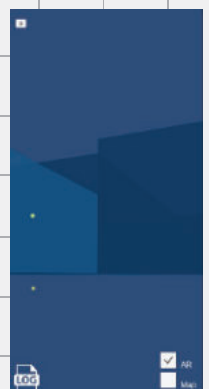
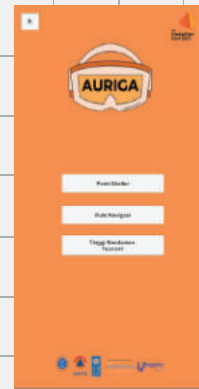
Method

1. Data Literature
2. Data Processing
3. Application Used
4. Platform Testing

Procedure



InaRISK



"Is Okay if you Lose or Win "

- Our Supervisor



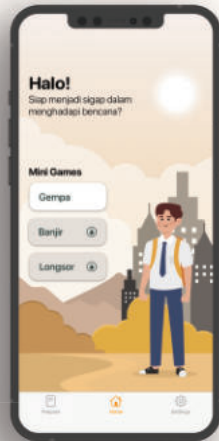


Edurisk

Educational game depicting events earthquake in a junior high school, this game aims to train attitude and responsiveness disaster.

1

Mini-games provide some frequent disaster events



2

Follow the instruction to survive when disaster come



Tsamara Alifia

A former interior design, currently spending my time learning UI/UX design and iOS development



Leo Fablo Silalahi

Self taught UI/UX designer, currently sharpen for UX foundation while learning iOS development



Rinaldi

Fullstack web development at the robotic pautomation companies

**Team
Trikora**



Indonesia