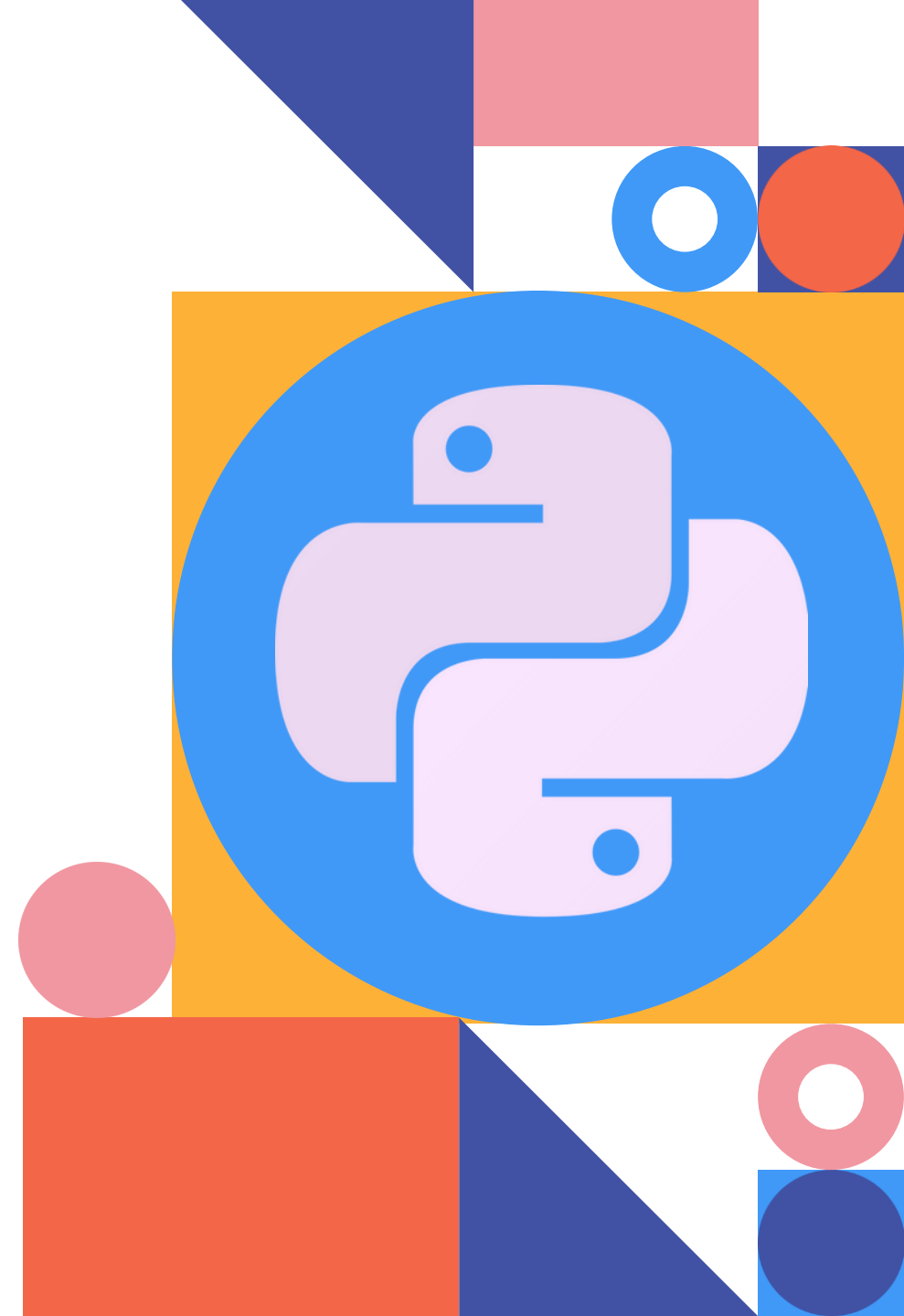# 2023 Data Science Final Project
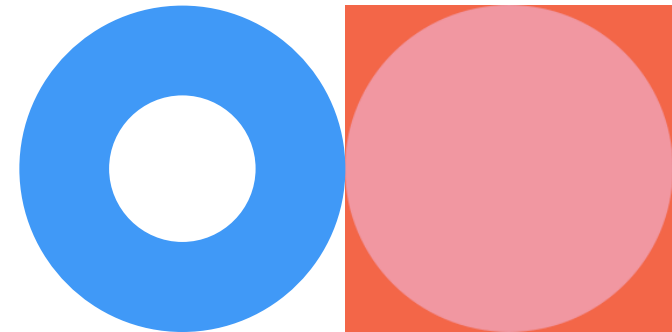
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→

Crop Type Identification

- Identify the crops in images.

- The dataset includes 10 types of crops and bare land.

- Each class has 300 images (224 x 224).

Dataset

Atemoya Banana Grape Cabbage Carrot Bare land

Guava Pineapple Mango Papaya Pumpkin

Requirements

Basic

- Splitting the images into training and testing dataset using a custom ratio

- Implementing a training loop using PyTorch

- Analyzing training results with a confusion matrix

- Evaluating the model's performance on a separate test dataset

- Explaining each line of code as much as you can

Advanced

- Using data augmentation

- Using regularization

Submission

📁 YourStudentID.zip

　　　　　|---------- YourStudentID_report (*.pdf)

　　　　　|---------- train.ipynb

　　　　　|---------- mymodel.pth　　Models can be saved using torch.save(model, mymodel.pth).

Notice:

- Each team member has to submit the aforementioned files.

- Do NOT upload the dataset.

Assessment (12%)

- Accuracy: 4% (see the right table)

- Report: 4%

- Presentation: 4%

Accuracy	Score
80%	1.0%
85%	2.0%
87%	2.5%
90%	3.0%
92%	3.5%
95%	4.0%