

BATALOG

PROGRESS REPORT #1.5

GROUP MEMBERS

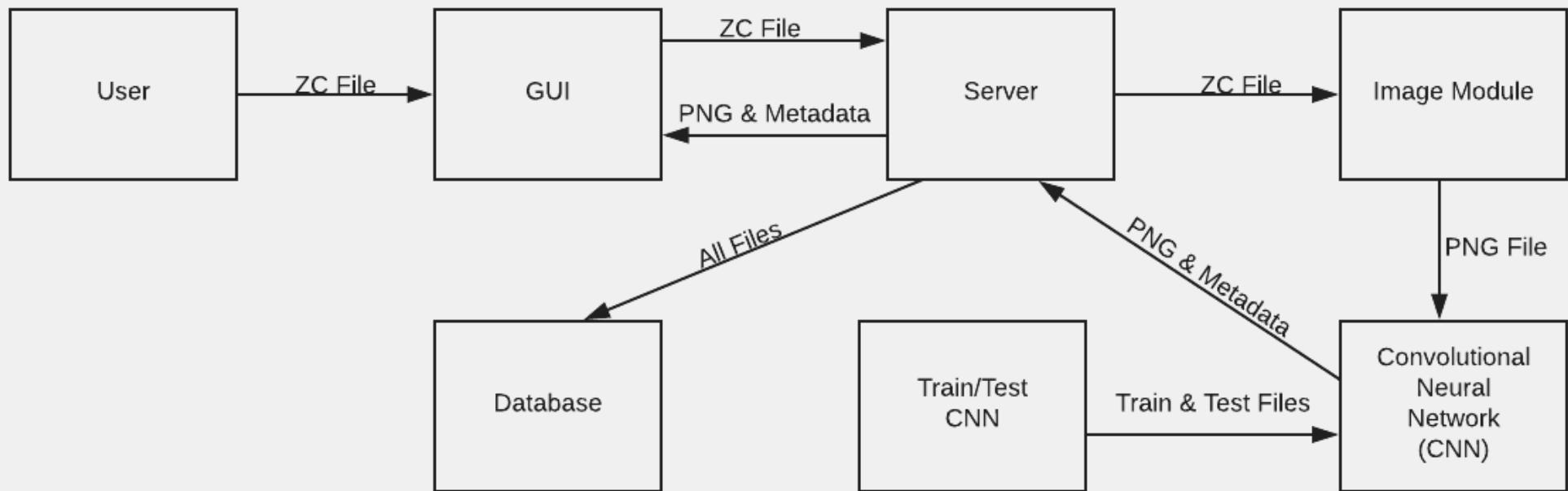
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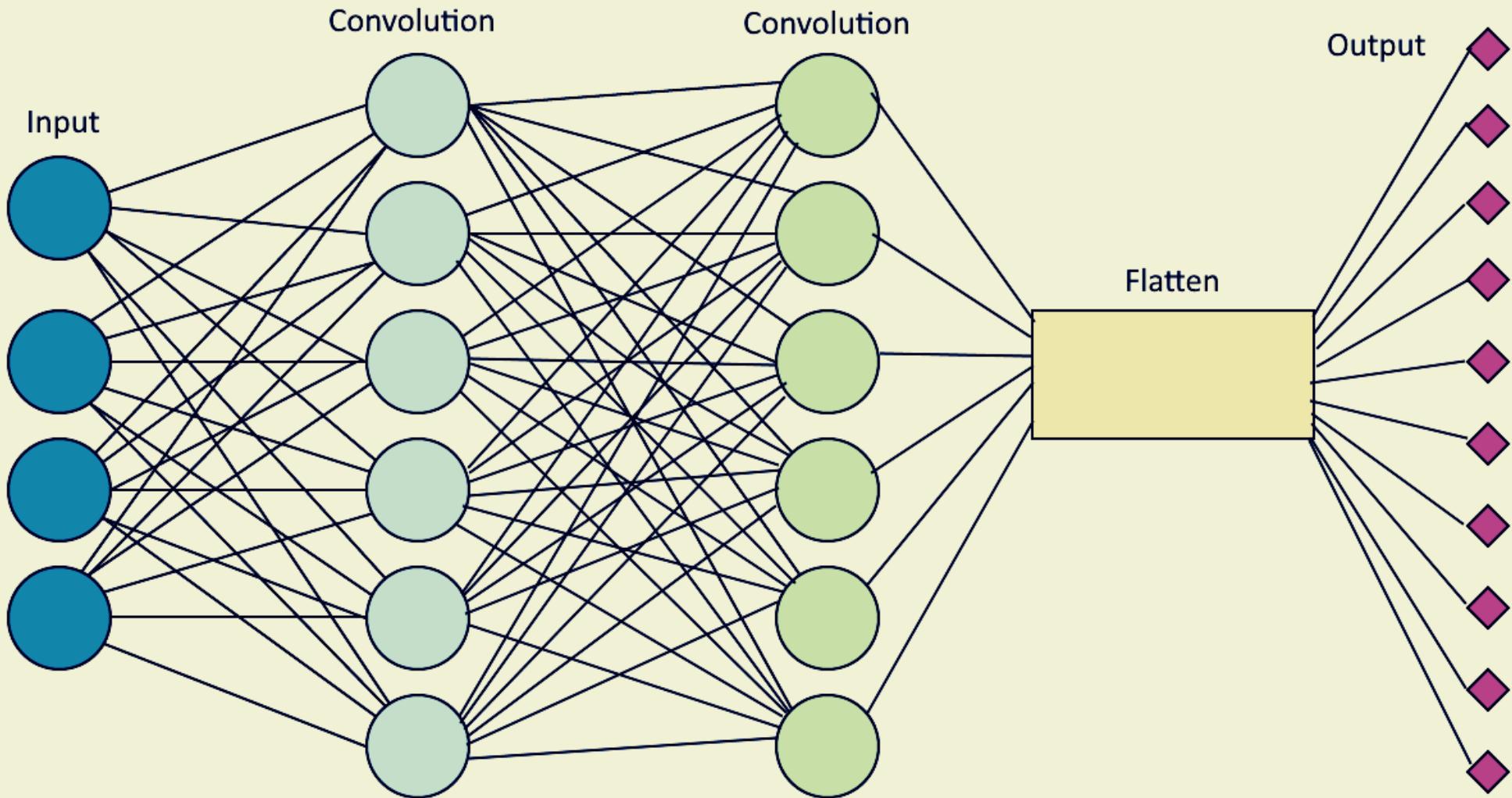
BATALOG DESIGNS

Main Focus

- The working of files through the modules and the Convolutional Neural Network.

The Research

- The CNN represents a major part of the original project that is incomplete



CNN DESIGN

- Due to complexity and theory, this research is addressed early
- This is one example of a CNN used with the MNIST dataset

PROGRESS REPORT

CNN Research

- Continued exploration into CNN inner workings
- Practiced classification w/ MNIST dataset

Prototype

- No convolutional layers
- Mostly a TensorFlow learning exercise
- Dataset pipeline
- A whole different class of debugging

PROJECT REQUIREMENTS

AREA

- Machine Learning
- Web Development
- Database Management

DEVELOPMENT ENVIRONMENTS

- Jupyter Notebook
- Atom
- Sublime Text

LIBRARIES

- TensorFlow + Keras API
- Numpy
- Scipy
- Pandas
- Matplotlib
- Sklearn
- Glob
- Dash
- Pillow 5
- Django 2

FRAMEWORK

- Django 2
- SQLite3
- Python 3

GENRE

- Research tool

PLATFORMS

- Web



LIBRARIES

- TensorFlow + Keras API - Deep learning tools
- Numpy - N-dimensional arrays and other math utilities
- Matplotlib - Python 2D plotting library
- Dash - Framework for analytical web applications
- Pillow - Image processing
- Django - Open source framework
- Situational- Glob, Scipy, Sklearn, Pandas

PRIORITIES (WEB INTERFACE)

1

SUPER

- File Interface
- File Stream

2

MAJOR

- Upload

3

MINOR

- User System
- Live Website

PRIORITIES (CNN IMPLEMENTATION)

1

SUPER

- Manually classify image data

2

MAJOR

- Develop CNN model
- Train model

3

MINOR

- Apply model to web application



2 Issues - 10 Story Points

New Issues

- Bat_Echolocation_2019 #10
+2 Implement CNN for image classification

[Filter by Epic Issues](#)**10 Epic help wanted**

- Bat_Echolocation_2019 #11
Develop Batalog web application

[Filter by Epic Issues](#)**Epic**

4 Issues - 8 Story Points

Icebox

- Bat_Echolocation_2019 #7
+2 Start on the requirement docs

[Sprint 2](#)**3 help wanted**

- Bat_Echolocation_2019 #4
+2 Diagram CNN implementation

[Implement CNN for image clas...](#)**5**

- Bat_Echolocation_2019 #12
+2 Manually classify png images

[Implement CNN for image clas...](#)**13**

- Bat_Echolocation_2019 #13
+2 Develop CNN model

[Implement CNN for image clas...](#)

3 Issues - 8 Story Points

Backlog

- Bat_Echolocation_2019 #6
+4 Presentation

[Sprint 2](#)**1 help wanted**

- Bat_Echolocation_2019 #5
+2 Research CNN

[Implement CNN for image clas...](#)**5**

- Bat_Echolocation_2019 #14
Explore Potential Libraries for Web Development

[Sprint 2](#)**2**

0 Issues - 0 Story Points

In Progress**0**

0 Issues - 0 Story Points

Review/QA**SPRINT PLANNING**

- ZenHub issues.
- Diagram
- Progress
- Hands on with Cgithub

SPRINT RESTROSPECTIVE

- Progress
- Problems

DAILY SCRUM MEETING

- When2meet
- Discord
- Messenger



THANK YOU

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BATALOG

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