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# BATALOG

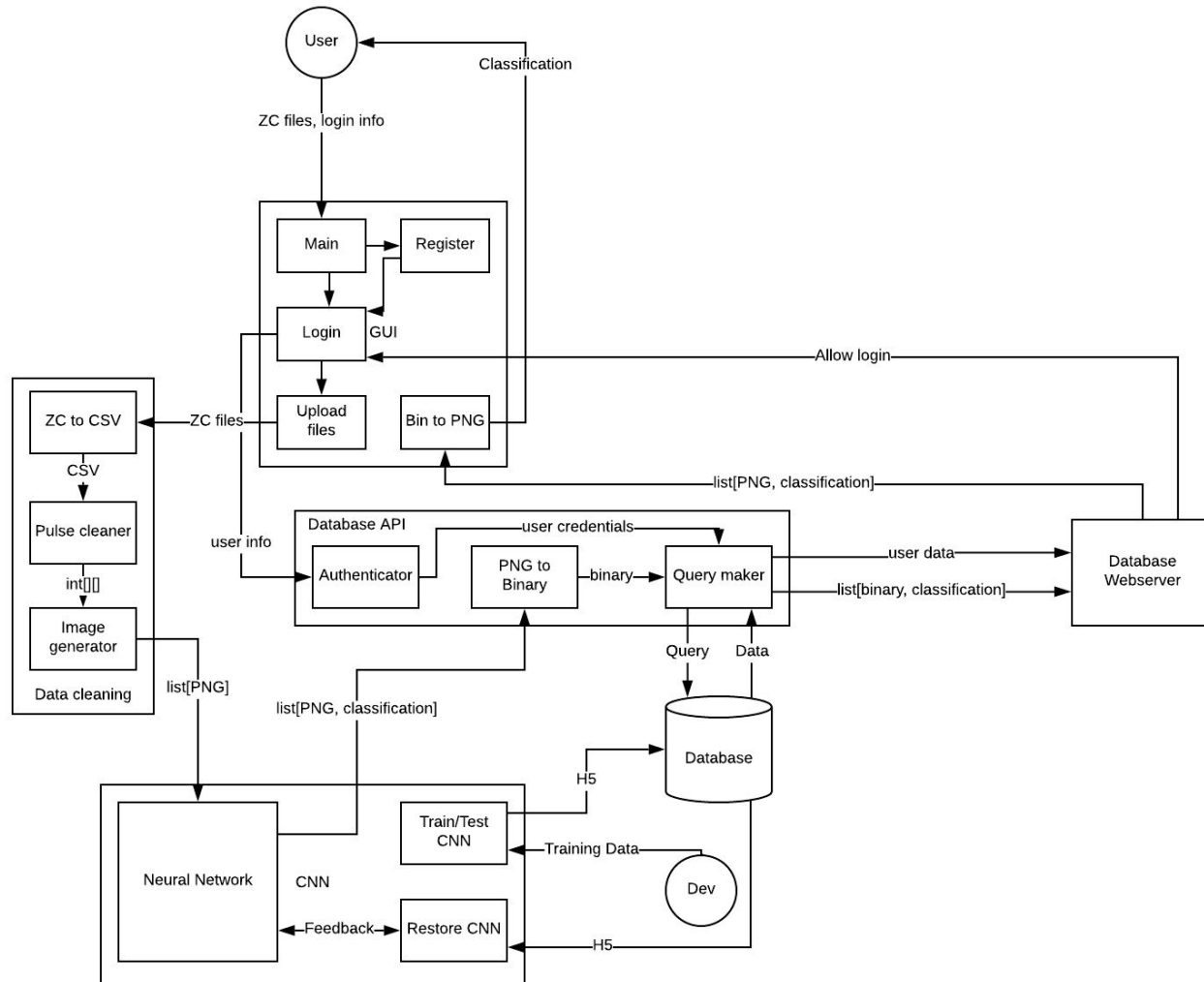
## Progress Report #2.1

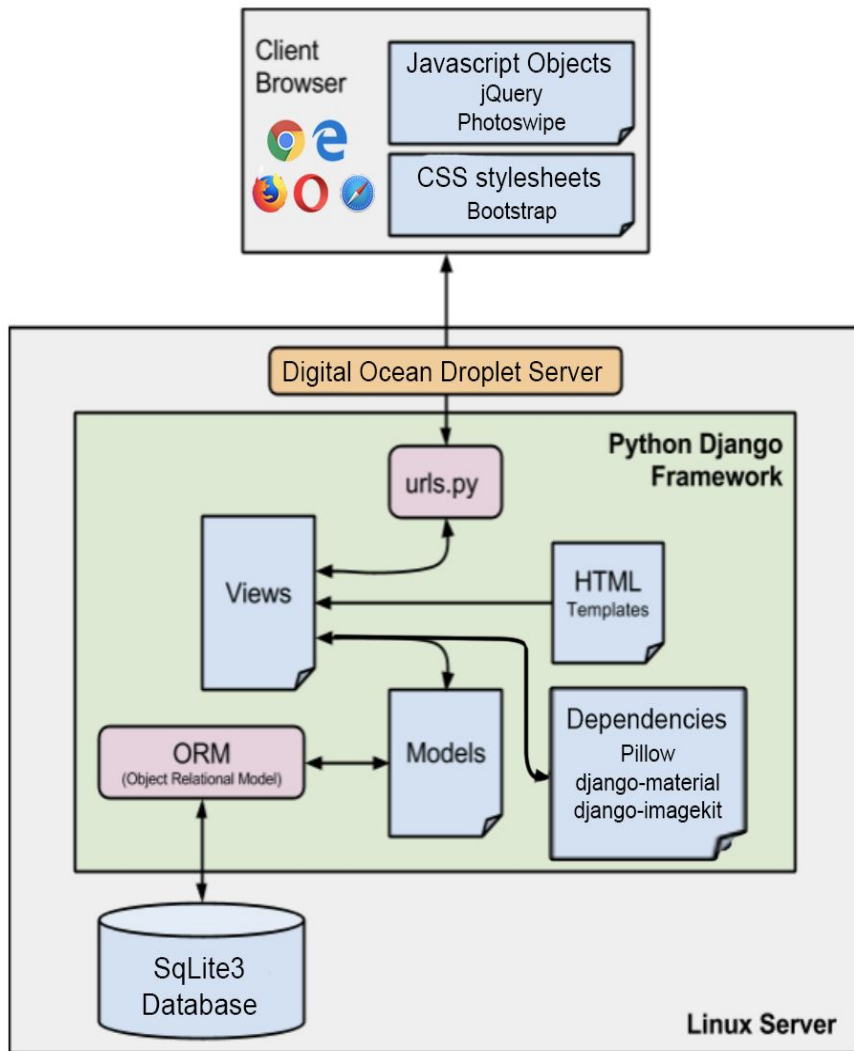
### Group Members:

Hadi S. (h\_soufi) | David M. (dlmassey)  
Rahim I. (r\_iqbal) | Kevin K. (knkeomal)  
Thien L. (t\_le)

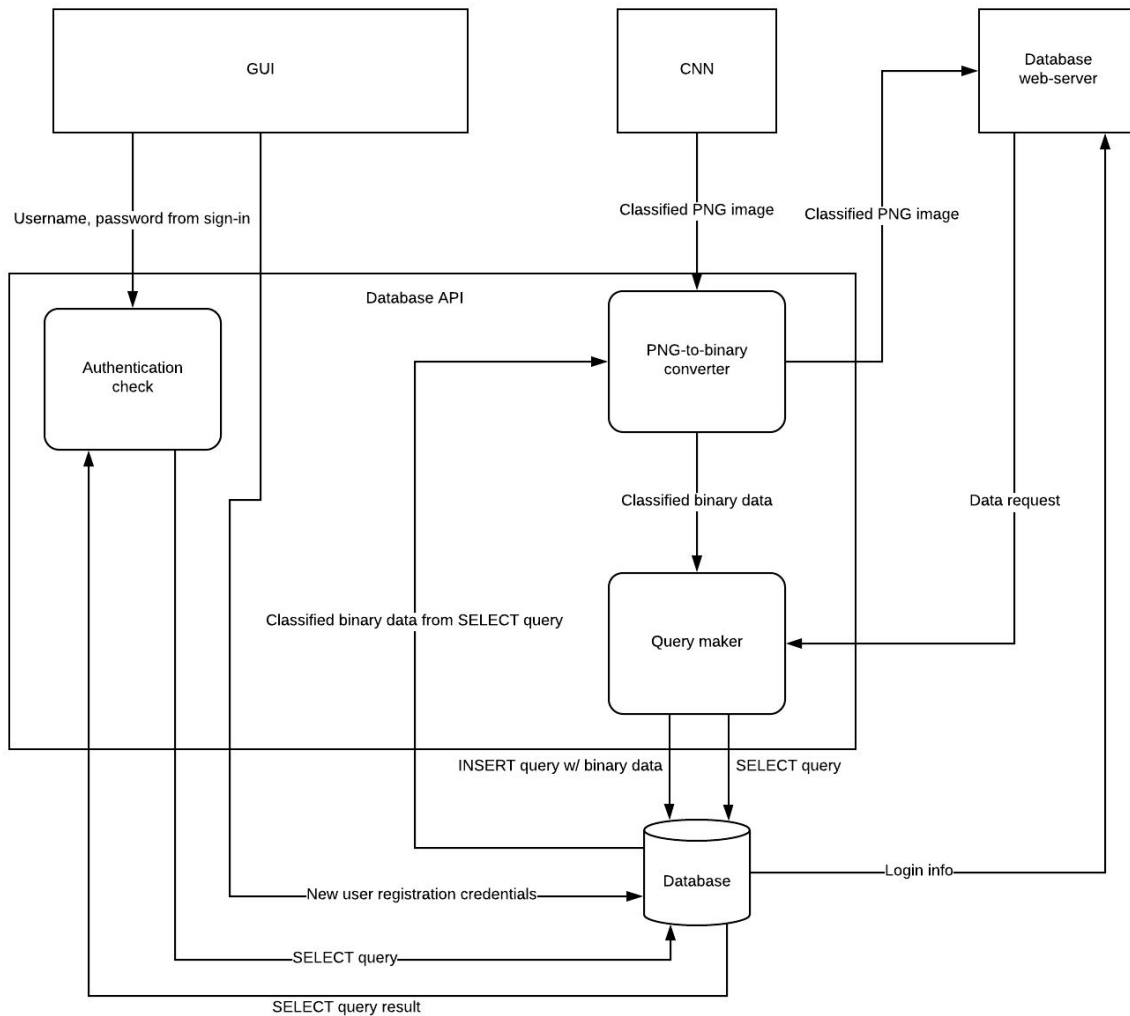


# Overall System Model



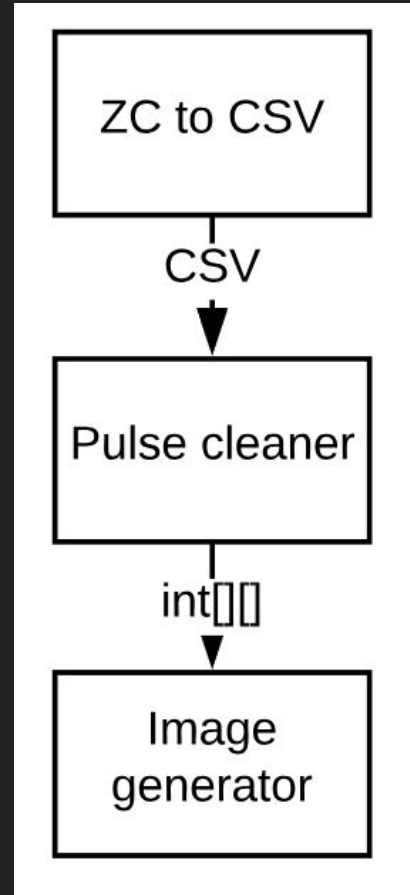


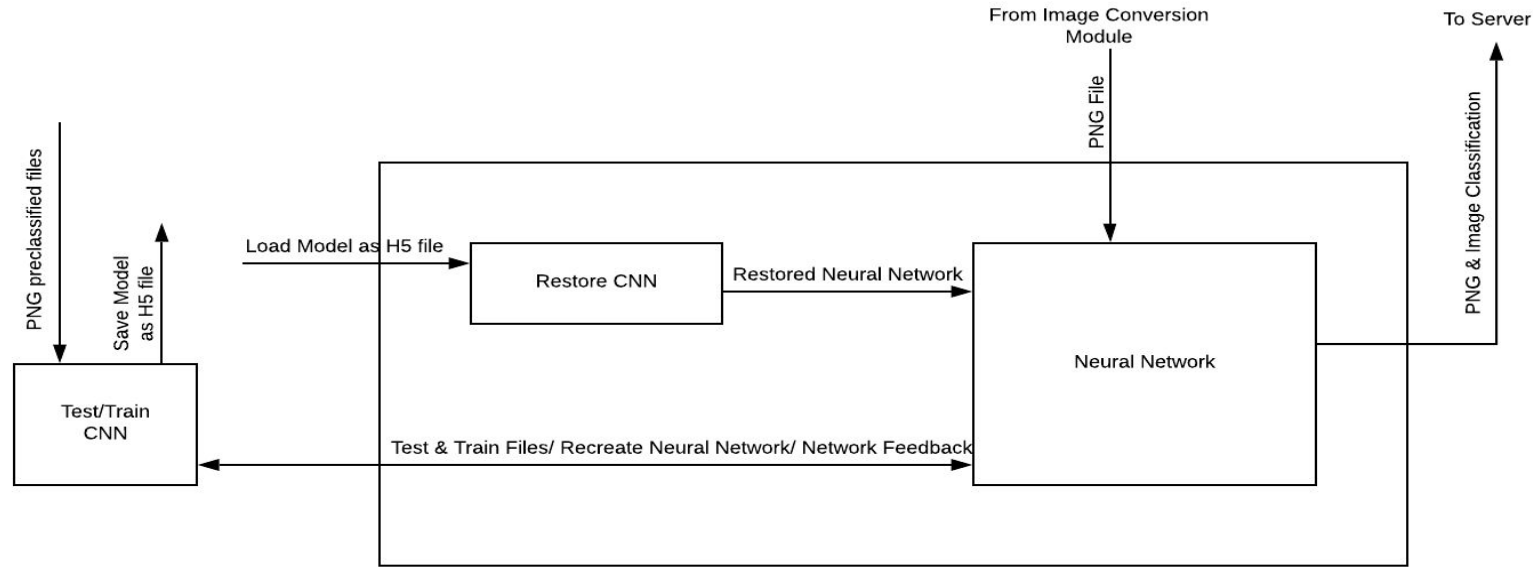
# Connection from web to database



# Database API

# Pulse Processing





- Added Test/Train CNN to the diagram above
- Preliminary models showed high accuracy but bad predictions
- Researched information about other models
- Decided to make the convolutional and pooling layers by hand using their math formulas
- Resulting model showed higher accuracy with greatly improved predictions.

# CNN

# Subsystems Analysis

CNN -  $O(n)$

Registration page -  $O(1)$

Zero-crossing file analysis -  $O(n)$

Database API operations -  $O(\log n)$

Overall system:

$O(n)$



# Scrum Sprint 4

## Sprint 4

Start Feb 15, 2019 [Change](#) Due by Feb 21, 2019 - Due today [Change](#)

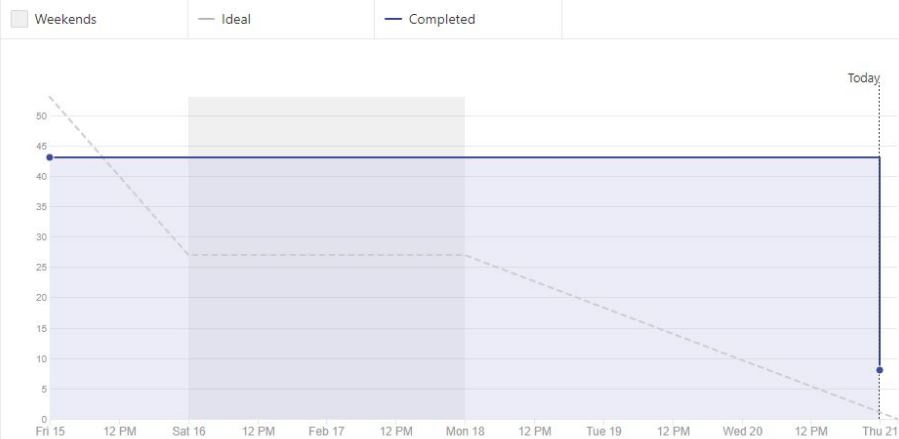
Labels ▾

Hide Pull Requests

Burn Pipelines ▾

### Burndown report

?



53 Total Story Points

45 Completed / 8 Remaining

5 Total Issues and Pull Requests

4 Completed / 1 Remaining

### Remaining Issues and Pull Requests

Story points

1 File Analysis GUI - Intro  
Bat\_Echolocation\_2019 #31 III Backlog ⬆ Sprint 4

8

### Completed Issues and Pull Requests

Story points

10 Implement data classification code [help wanted](#)  
Bat\_Echolocation\_2019 #12 III Closed ⬆ Sprint 4

10

10 Improve database API diagram [help wanted](#)  
Bat\_Echolocation\_2019 #30 III Closed ⬆ Sprint 4

10

10 Create data classification code [help wanted](#)  
Bat\_Echolocation\_2019 #32 III Closed ⬆ Sprint 4

10

15 Classify 25,000 observations - 1 [help wanted](#)  
Bat\_Echolocation\_2019 #34 III Closed ⬆ Sprint 4

15



**Thank you!**



**Group Members:**  
**Hadi S.** (h\_soufi) | **David M.** (dlmassey)  
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**Thien L.** (t\_le)

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# **BATALOG**

## **Progress Report #2.1**