



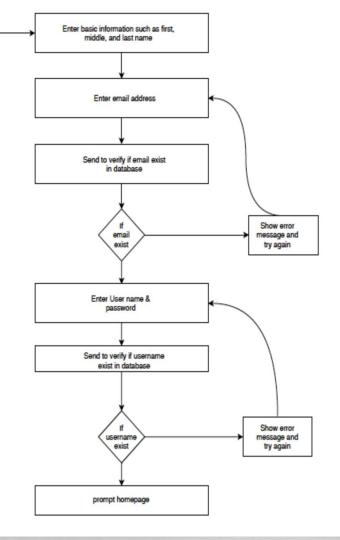
Subsystems Design & Analysis

Front End:

- User registration page
- Zero-crossing file analysis
- Gallery

Back End:

- Connection from web to database
- Database API
- Image conversion module
- CNN

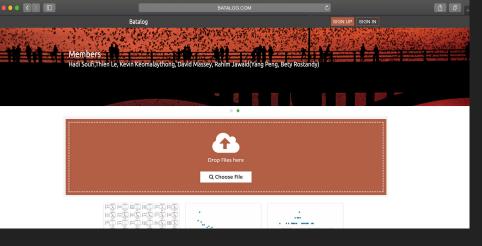


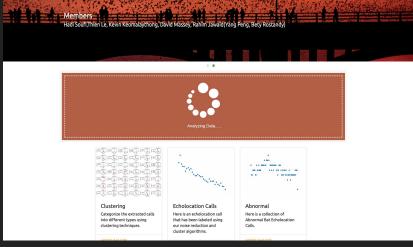
Users

Registration

Page

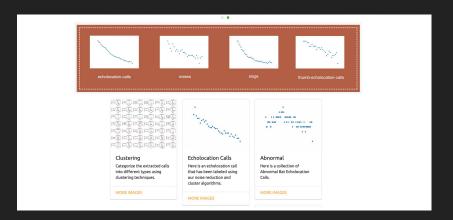
User Registration

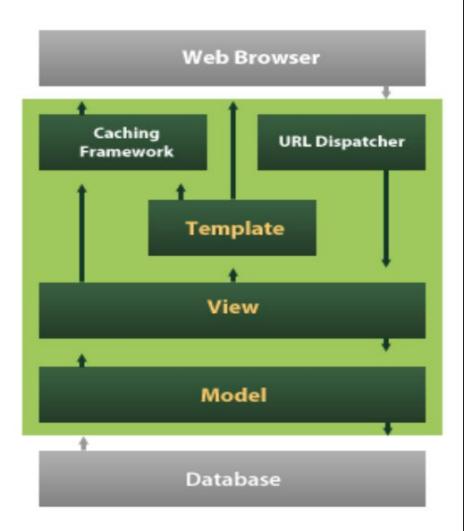




Zero-crossing file analysis

A mockup design for the website when the user uploads their file.





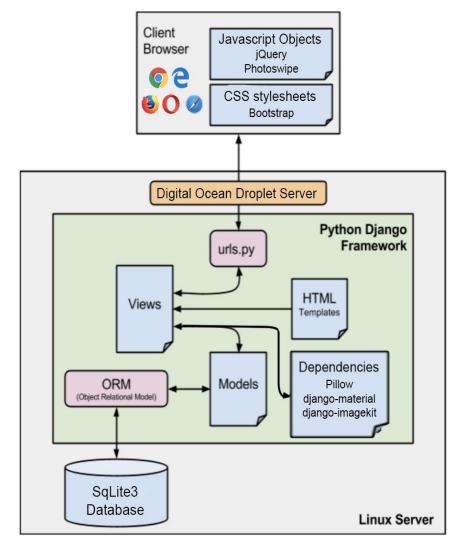
Django Gallery

Models - Describes the data.

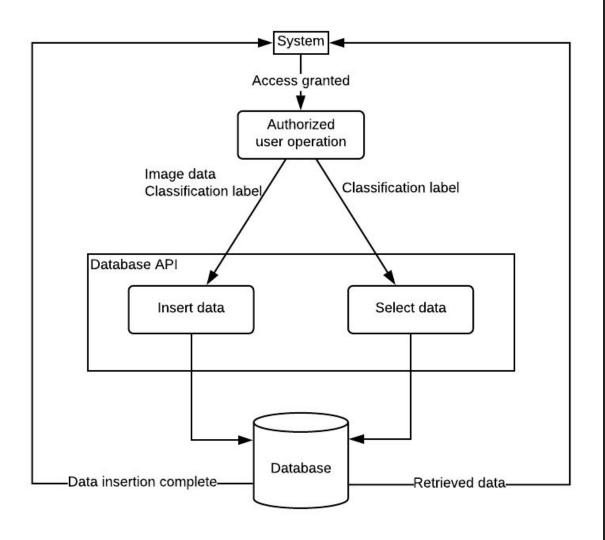
Views - Controls what users sees.

Templates - How user sees it.

Controller - URL dispatcher.



Connection from web to database



Database API

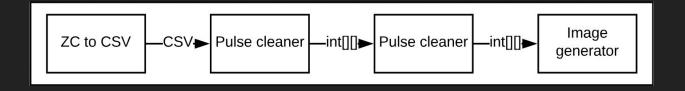
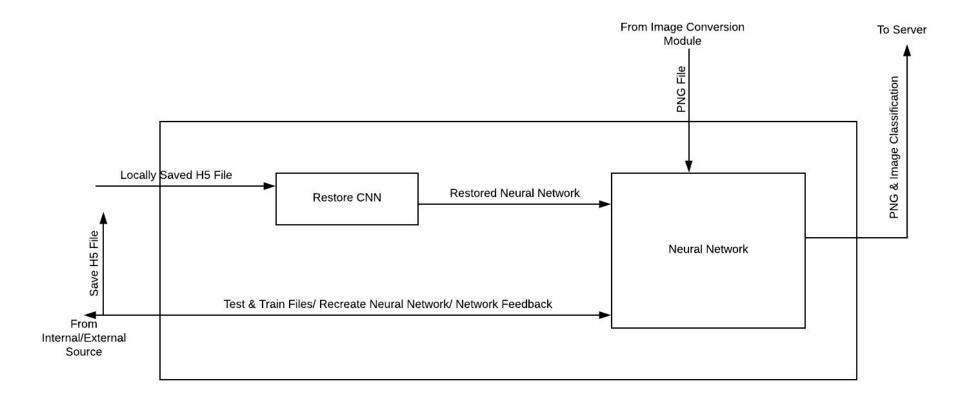
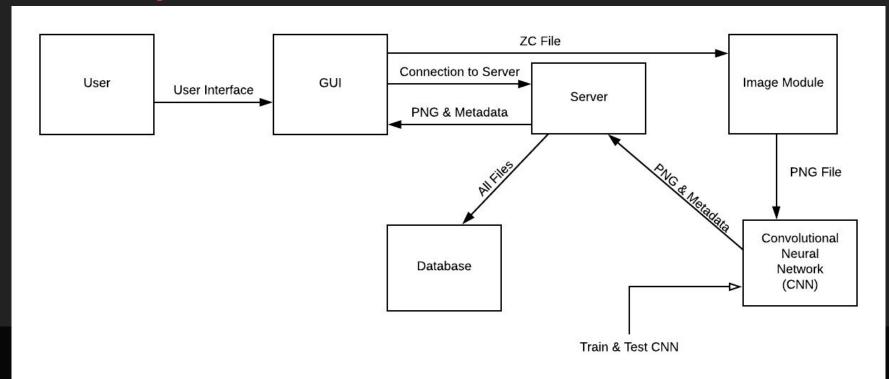


Image conversion module



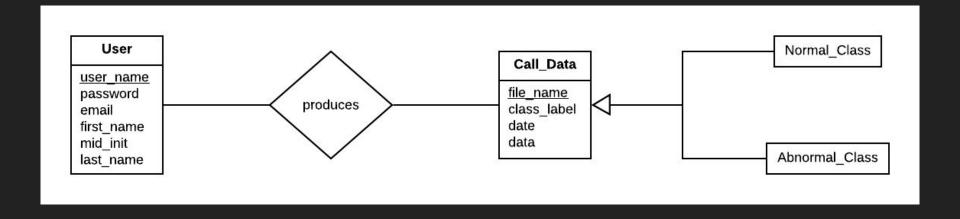
Overall System Model



User Classification ZC files, login info Main Register Login GUI Upload ZC to CSV ZC files Output files csv -list[PNG, classification]-User info Pulse cleaner Database -list[PNG, classification]-Database API int[][] Webserver Pulse cleaner User info list[PNG, classification] int[][] Image -list[PNG]----CNN generator Database Data cleaning

Data Flow, I/O, Control

Entity-Relationship Model



Subsystems Analysis

CNN - O(1)

Registration page - O(1)

Zero-crossing file analysis - O(n)

Database API operations - O(log n)

Overall system:

O(n)

Scrum Sprint 3

Completed Issues and Pull Requests	Story points
Identify Subsystems help wanted Bat_Echolocation_2019 #15 Closed * Sprint 3	(5)
© Develop E-R diagram for database help wanted Bat_Echolocation_2019 #17 III Closed *Sprint 3	(8)
Algorithm Analysis	10
Develop subsystem diagram for database help wanted Bat_Echolocation_2019 #22 III Closed ** Sprint 3	8
Progress Report Presentation 2 Epic help wanted Bat_Echolocation_2019 #23 III Closed * Sprint 3	10
Complete #4 on the progress report document Bat_Echolocation_2019 #24 III Closed * Sprint 3	(15)
Complete #5 on the progress report document Bat_Echolocation_2019 #25 III Closed † Sprint 3	(15)
© Create data dictionary for database help wanted Bat_Echolocation_2019 #26 III Closed *Sprint 3	(8)
Website graphical user interface using Django - Subsystem Bat_Echolocation_2019 #27 III Closed ↑ Sprint 3	2
Connection from web to Database Bat_Echolocation_2019 #28 III Closed * Sprint 3	2

