# CS 340 README Template

## AnimalShelter CRUD – Create/Read/Update/Delete Animal Records

## Motivation

*Grazioso Salvare would like a dashboard for viewing their database of dogs for Rescue teams. Will use Dash to create an admin interface quickly, and Plotly to show the maps and data tables to filter the records.*

*The project is supposed to be able to filter between Water, Mountain, and Disaster Recovery Dogs. It allows you to reset the selection, should you want to look at all dogs available.*

*MongoDB is a structure-less database, allowing you to store whatever information on a node that you would want. There are no specific qualities or capabilities that it only gives to Python; if you install php8.1-mongodb, you’d have the exact same api, but in PHP bindings instead. We use it as the Model because this is what actually has the userland data.*

*Dash is a Rapid Application Development framework for creating applications quickly. It allows us to create a fully-featured dashboard with just a few lines of code, without having to worry about boilerplate to set up the website. We use the Dash Core Components (dcc) and Dash HTML Components (html) to call methods that return html tags that represent the structure of our application. This is the View portion of MVC.*

***Challenges***

*This is going to be a big section. Much of the code samples from the dash website itself didn’t work for me. Namely, the dcc.RadioItems() function always crashed, even when I copied it verbatim from the documentation in the Add’l Resources section. I don’t know if the version of Dash on the project is different than the version represented by the documentation.*

*Please see the python file for more comments on this. I’ve documented every challenge I had in the source code, with comments that may have been a slight bit too snarky.*

## Getting Started

*Download the repository and change directory into the uncompressed files. From here, start `jupyter notebook` and open the ipynb file. Run the contents.*

## Installation

*Required Software:  
  
jupyter notebook*

*python3*

## Usage

*cd AnimalShelter*

*jupyter notebook*

*Open a Web Browser and Navigate to .ipynb file*

### Code Example

*shelter = AnimalShelter()*

*chubby = shelter.read( { “id”: 24000 } )*

*shelter.update({“id”: 24000}, { “name”: “My New Cat’s Name” })*

*shelter.delete({ “id”: 24000 });*

### Tests

*No tests provided as of yet*

### Screenshots

## Contact

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