# CS 340 README Template

*Use this template to complete your README file. When completing the template, keep the headings as they are so that your document has a clear organization. Remove the italicized prompt text after you have completed each section for a polished final document.*

## About the Project/Project Title

*Animal Shelter.*

*This database is used by Grazioso Salvare, an international rescue-animal training company, to help identify dogs that are good candidates for training based on data from animal shelters.*

## Motivation

*This project exists to facilitate a more successful and efficient way for the employees of Grazioso Salvare to identify dogs that may qualify as training candidates. It is used as a first step in identifying these dogs. Animal data is imported from the animal shelters and then categorized to help identify the potential training dogs.*

## Getting Started

*To get a local copy up and running, follow these simple steps:*

*Connect to localhost*

*Select authentication*

*Connect to “AAC” database*

*Import files*

*Search functions to locate dogs based on age, size, etc.*

## Installation

*Requires internet access/connectivity*

*Python to run commands*

## Usage

*This project can be used to search for potential dogs that are good candidates for the rescue-dog training program.*

### Code Example

*"class AnimalShelter(object):\n",*

*" \"\"CRUD operations for Animal collection in MongoDB\"\"\n",*

*" \n",*

*" def \_\_init\_\_(self, username=None, password=None):\n",*

*" # Initializing the MongoClient. This helps to\n",*

*" # access the MongoDB databases and collections.\n",*

*" if username and password:\n",*

*" self.client = MongoClient('mongodb://%s:%s@localhost:38337' % (username, password))\n",*

*" else:\n",*

*" self.client = MongoClient('mongodb://localhost:27017')\n",*

*" self.database = self.client['project']\n",*

*" \n",*

*" # Complete this create method to implement the C in CRUD.\n",*

*" def create(self, data):\n",*

*" if data is not None:\n",*

*" insert = self.database.animals.insert(data) # data should be dictionary\n",*

*" if insert!=0:\n",*

*" return True\n",*

*" else:\n",*

*" return False\n",*

*" else:\n",*

*" raise Exception(\"Nothing to save, because data parameter is empty\")\n",*

*" \n",*

*" \n",*

*" # Create method to implement the R in CRUD.\n",*

*" def read(self,criteria=None):\n",*

*" \n",*

*" if criteria:\n",*

*" data = self.database.animals.find(criteria,{\"\_id\":False})\n",*

*" else:\n",*

*" data = self.database.animals.find( {}, {\"\_id\":False})\n",*

*" \n",*

*" return data\n",*

*" \n",*

### Tests

*"main.py\n",*

*" from AnimalShelter import AnimalShelter\n",*

*" \n",*

*" a = AnimalShelter()\n",*

*" animal\_data = [\n",*

*" {\n",*

*" \"name\":\"dog1\",\n",*

*" \"type\":\"dog\"\n",*

*" },\n",*

*" {\n",*

*" \"name\":\"dog2\",\n",*

*" \"type\":\"dog\"\n",*

*" },\n",*

*" {\n",*

*" \"name\":\"cat1\",\n",*

*" \"type\":\"cat\"\n",*

*" }\n",*

*" ]\n",*

*" \n",*

*" for i in animal\_data:\n",*

*" a.create(i)\n",*

*" \n",*

*" dogs = a.read( {\"type\":\"dog\"} )\n",*

*" for dog in dogs:\n",*

*" print(dog)\n",*

*" "*

*]*

*}*

### Screenshots

Graphical user interface, text

Description automatically generated

Graphical user interface, text

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Graphical user interface, text

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Graphical user interface, text

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## Contact

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