Adopt & Rehome

Team member: Xiaohan Zhang, Quan Liang

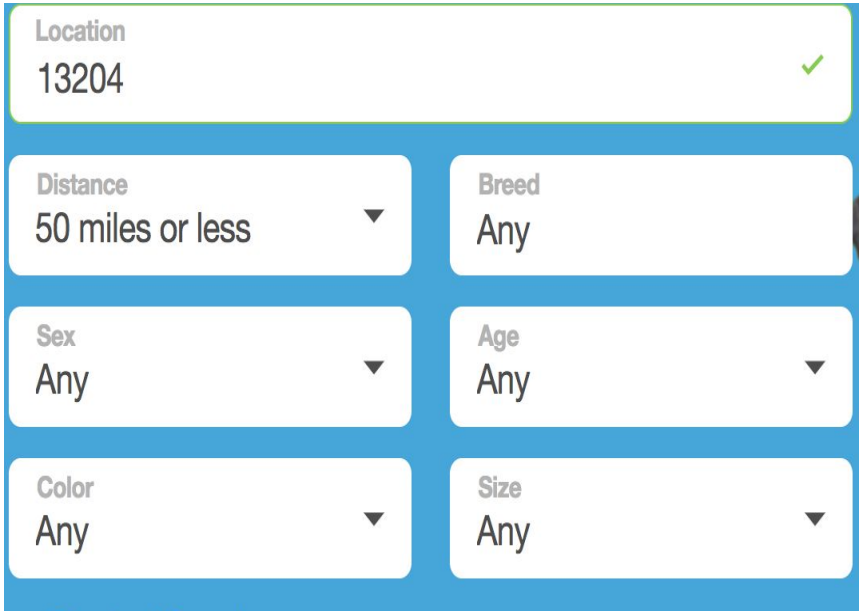
Project Overview

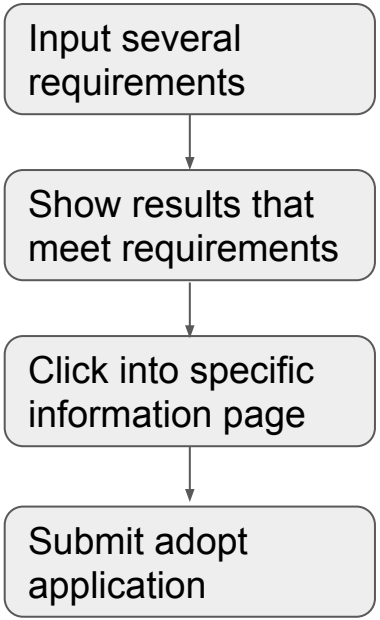
Develop a web application that allows people to adopt/rehome pets easier with Amazon Web Service cloud computing.

Project Contents

- **Adopt pets**
- **Rehome for pets**
- **Pet adopters forum**
- **User authentication**

Project Goals - Adopt pets





Project Goals - Find a new home

Create profile about pet

↓

Choose potential adopters

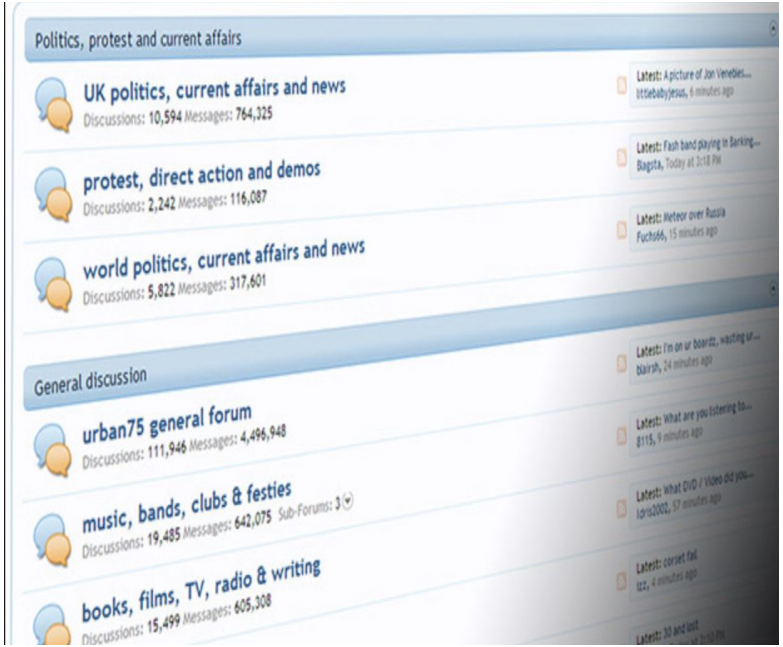
↓

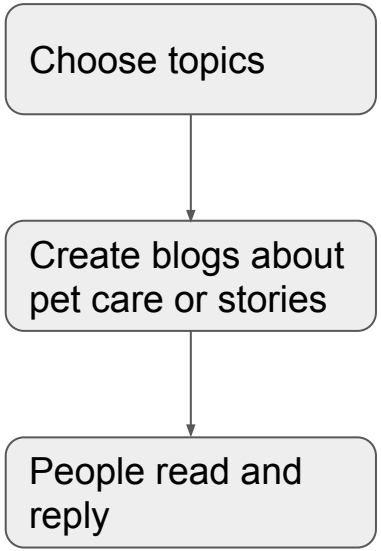
Arrange meetings

↓

Finish and close application

Project Goals - Forum

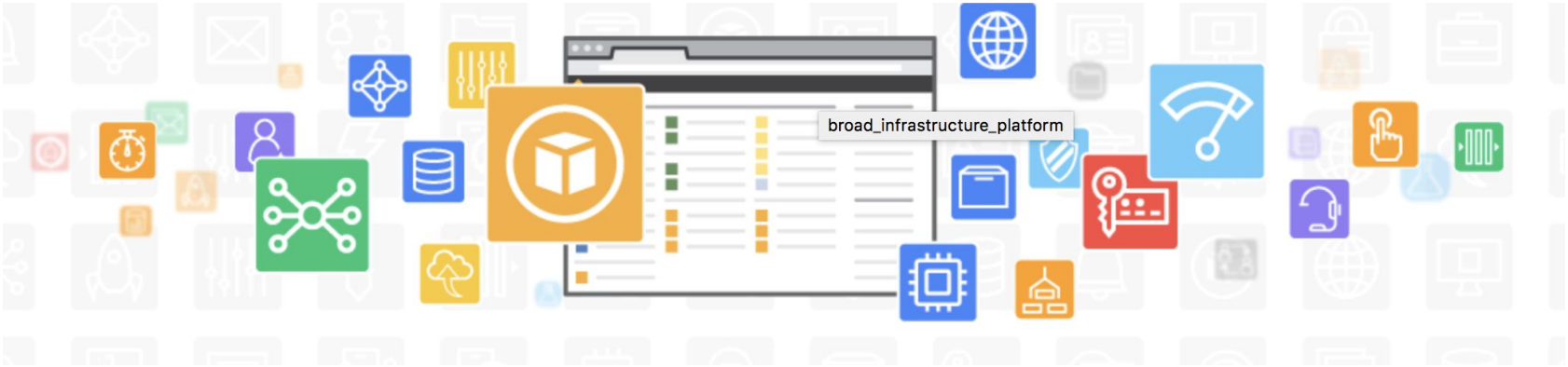




Technologies - AWS

Cloud Computing with Amazon Web Services

- Amazon Web Services (AWS) is a secure cloud services platform, offering compute power, database storage, content delivery and other functionality to help businesses scale and grow.



Technologies - AWS

Why use Amazon Web Service for hosting?

- Broad CMS and development platform support
- Datacenters worldwide
- Dynamically grow and shrink resources

Technologies - AWS EC2

Amazon Elastic Compute Cloud

- It is a web service that provides secure, resizable compute capacity in the cloud, allowing users to rent virtual computers on which to run their own computer applications.

Benefits:

- Elastic web-scale computing
- Completely controlled
- Flexible cloud hosting services

Technologies

- Backend: Python + Django
- Frontend: HTML + Bootstrap + CSS + Javascript
- Databse: MySQL

Python + Django

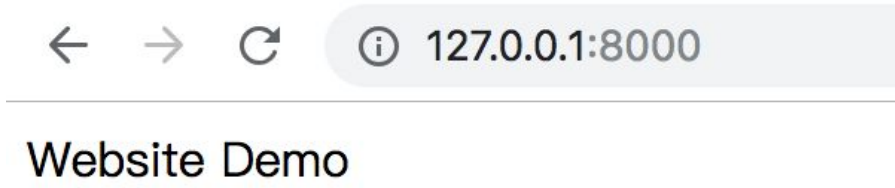
Python: an interpreted, high-level, general-purpose programming language

Django: a Python-based web framework which base on MTV architecture, free and open source

Emphasizes reusability of components, less code, low coupling, rapid development and clean design

Django

```
^CQuans-MacBook-Pro:HelloWorld quanliang$ tree
.
├── HelloWorld
│   ├── __init__.py
│   ├── __pycache__
│   │   ├── __init__.cpython-37.pyc
│   │   ├── settings.cpython-37.pyc
│   │   ├── urls.cpython-37.pyc
│   │   ├── view.cpython-37.pyc
│   │   └── wsgi.cpython-37.pyc
│   ├── settings.py
│   ├── urls.py
│   ├── view.py
│   └── wsgi.py
├── db.sqlite3
└── manage.py
```



Frontend: HTML + Bootstrap + CSS + JavaScript

HTML: the fundamental technology used to define the structure and the content of a webpage.

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title>HTML simple example</title>
</head>
<body>

<h1>Hello World!</h1>

</body>
</html>
```

JavaScript

JavaScript is the programming language of HTML and the Web. A high-level, interpreted programming language.

CSS, Bootstrap

CSS: CSS is a language that describes the style of an HTML document, describes how HTML elements should be displayed.

Bootstrap: the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first websites.

```
<title>CSS Demo</title>
<style>
h1
{
    color:orange;
    text-align:center;
}
</style>
</head>
<body>
<h1>Hello World</h1>
```

Database:MySQL

An open source **relational database management** system

High performance, reliability, and ease-of-use

Provide API for different programming language

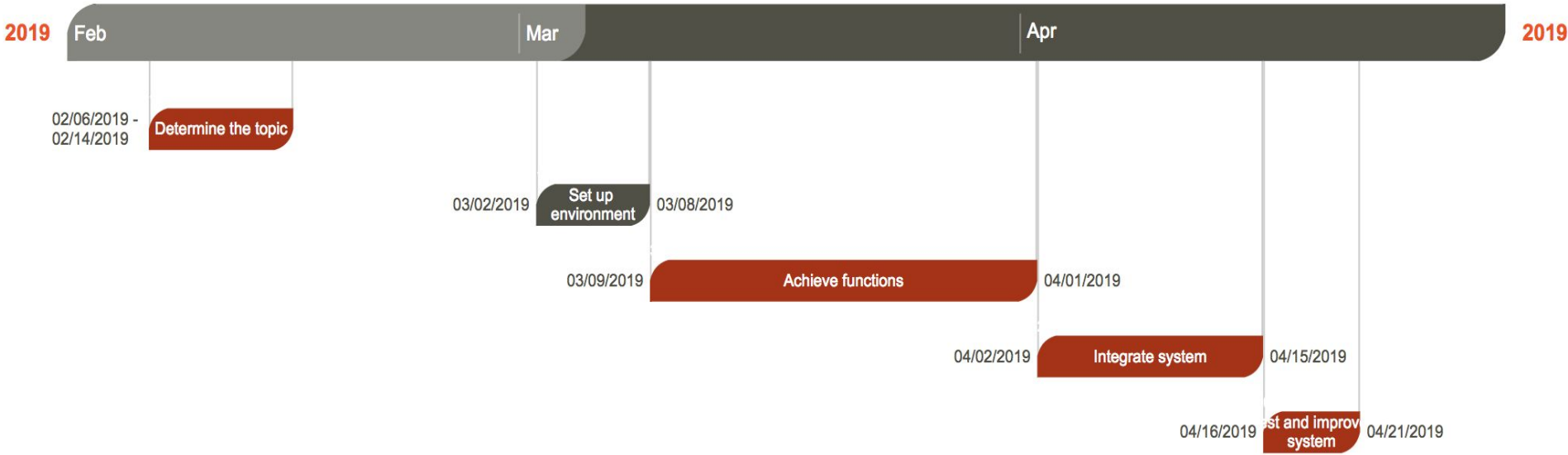
Timeline

Determine the topic and technology tools	2/6 - 2/14

Topic : a web application related to adopting the pets
Technology tools :
HTML5 + JavaScript + Bootstrap
Python + Django + MySQL

Set up environment and launch an EC2 instance and in AWS	3/2 - 3/6
Achieve adopt pet and find new house function	3/9 - 4/1
Achieve the blog forum and integrate the system	4/2 - 4/15
Test and improve the system	4/16 - 4/21

Project Milestones



Tasks Parition

Xiaohan Zhang:

1. Frontend and backend of Adopt pets function

2. Frontend and backend of Rehome function

Quan Liang:

1. User registeration

2. Frontend and backend of forum

Thank you!