Singidunum University, January 27th, 2020
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Web Programming Project

Quick Project Summary

Yūgen is a single-page web application that focuses on making traveling stress-free by incorporating main aspects of travel necessities such as **transportation and accommodation** into one app (*definitely not stolen from **Booking***).

Some of the app functionalities are:

➔   **User Authentication**
➔   **Accommodation reservation**
➔   **Flight ticket purchase**
➔   **System Administration**

Types of users:

➔   **Admin**
➔   **Regular User**

More on these in the following slides.

Authentication And Registration

Authentication is done through JWT (JSON Web Token) and cookies 🍪.

➔ **Login**
   Both Regular User and Admin login are done through the same interface. This is accomplished by checking for the user type after authentication.

➔ **Registration**
   Regular User registration is accomplished by requiring input of non-existent e-mail addresses .

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What tools and technologies have been used to build this project?

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By tools and technologies, what is meant is: **programming languages, database software, frameworks** etc.

Languages

- **Python**
- **Javascript**
- **HTML**
- **CSS**
- **SQL**

Frameworks

- **Flask (backend)**
- **AngularJS (frontend)**

Libraries

- **Bootstrap**
- **UI-Router**
- **UI-Bootstrap**

Software

- **MySQL**

The database is populated with

194 countries,
14983 cities,
7392 airports,
1572 airlines
for simulating real-life data management.

Regular User

Below are Regular User's functionalities

➜ **Flight Ticket Purchase**
Users can purchase flight tickets by picking a city, date, and flight type.

➜ **Accommodation Reservation**
Users can reserve certain accommodation by selecting a date, city/country, type of accommodation, stars etc. Accommodation can also be sorted by price per night.
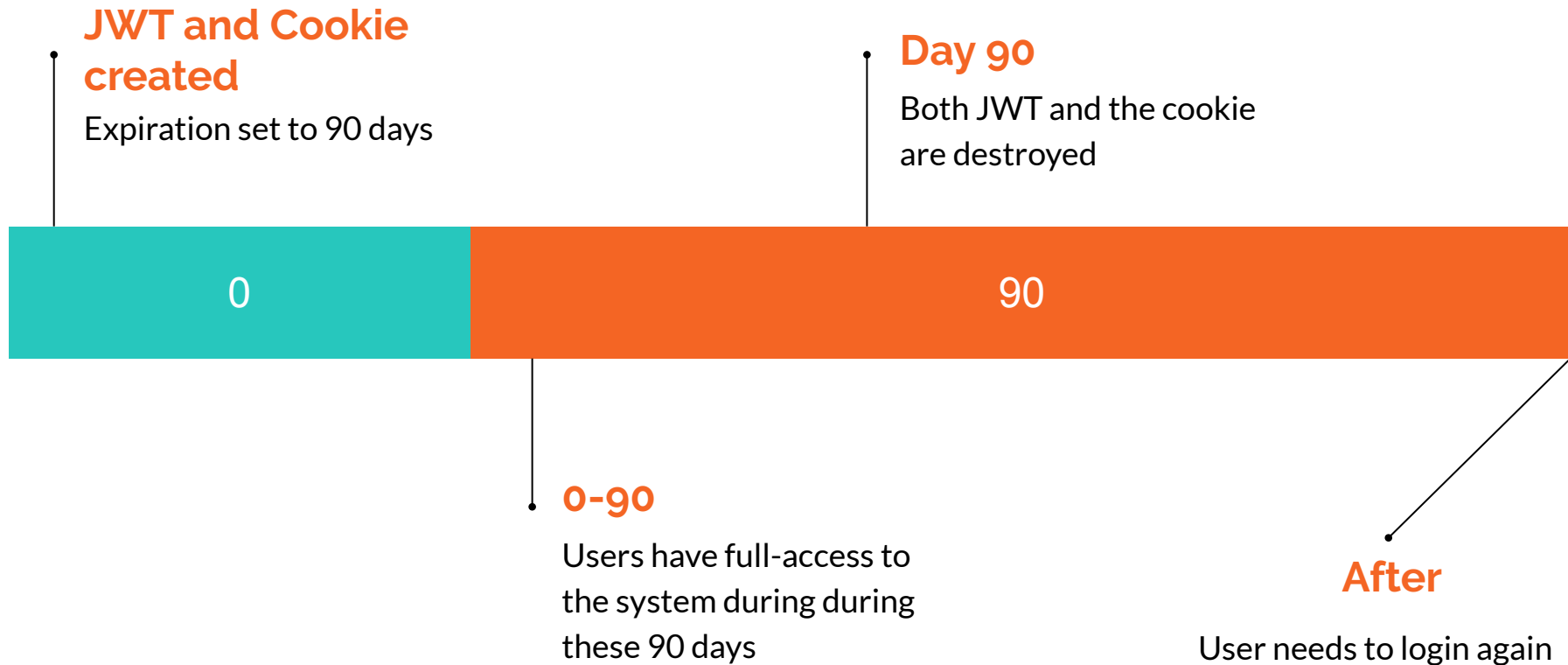
Admin

Below are Admin's functionalities

➔ **Homepage**
Homepage is consisted of 3 tables (users, accommodations, flights). Users can be deleted but not edited because of the JWT validation. Accommodations and Flights can both be deleted, and edited.

➔ **(Admin, Accommodation, Flight) Addition**
Functionality of adding new admins, accommodations, and flights.

JWT and Cookie

JWT and Cookie created

Expiration set to 90 days

Day 90

Both JWT and the cookie are destroyed

0

90

0-90

Users have full-access to the system during during these 90 days

After

User needs to login again

Three-Tier Architecture

PYTHON

FLASK

BACKEND

ANGULARJS

HTML

CSS

JAVASCRIPT

FRONTEND

MYSQL

DATABASE

Thank you!

Interested in testing Yūgen? Go to
https://gitlab.com/bullFroggie/y-gen