



# VIRGIL'S TRAVELS

## CECS 445: Software Design and Architecture (Sprint 1-4)

*Team: UTI*

*Product: **Virgil's Travels** (Web Application)*

*Professor: Hubert Huynh*

*Deliverable: **Sprint 3 and 4 Documentation***



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## Table of Contents

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<b>Executive Summary</b>	<b>4</b>
<b>Software Mission</b>	<b>6</b>
<b>Sprint 3</b>	<b>7</b>
<b>Process: Scrum Documents</b>	<b>7</b>
Pointage Methodology	7
Sprint Planning	9
Product Backlog	11
Sprint Backlog	13
Sprint Burndown Chart	14
Sprint Review	16
Sprint Retrospective	16
<b>Software Architecture</b>	<b>17</b>
Sequence Diagram	17
Class Diagram	18
Deployment View Diagram	21
<b>Software Development</b>	<b>21</b>
Software Quality	22
UI Overview	22
UX Overview	22
<b>Prototype/Products</b>	<b>25</b>
<b>Sprint 4</b>	<b>29</b>
<b>Process: Scrum Documents</b>	<b>29</b>
Sprint Planning	29
Product Backlog	30
Sprint Backlog	31
Sprint Burndown Chart	32
Sprint Review	33
Sprint Retrospective	34
Software Architecture	35
Sequence Diagram	35
Class Diagram	36
Deployment View Diagram	38



# VIRGIL'S TRAVELS

<b>Software Development</b>	<b>39</b>
<b>Software Quality</b>	<b>39</b>
UI Overview	39
UX Overview	40
<b>Prototype/Products</b>	<b>47</b>
<b>Video Demo</b>	<b>50</b>
<b>End of Sprint 4 Documentation</b>	<b>50</b>
<b>9. Addendum</b>	<b>72</b>
<b>Prerequisites</b>	<b>72</b>
Specifications & Tools	72
Back-end	72
Front-end	72
<b>Downloading Application</b>	<b>72</b>
<b>Verify Prerequisites</b>	<b>72</b>
<b>Running Application</b>	<b>73</b>
Back-end	73
Front-end	74
<b>Contributing</b>	<b>74</b>
<b>Support From Developers</b>	<b>75</b>
Contact Information	75



## 1) Executive Summary

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### Project Vision

- Our application, Virgil's Travels, aims to provide an interactive, all encompassing travel site that provides users with various options other sites may lack. We aim to make our application as social as possible by having users create profiles and see what other users have purchased, reviewed, and shared about their trips.
- Virgil's Travels is a Web Application. Ideally we would develop both a web application and a mobile application but for the scope of the class it is best to choose a web application for the following reasons.
  - Webapps work on smartphones and computers
  - No need to worry about developing the application twice. (Once for IOS devices and another time for Android OS devices)
- We plan on utilizing a great variety of technologies. Below we list the various technologies and their uses.
  - React will be used for front-end and it'll be used as the view of our application.
    - JavaScript will be used to utilized the React framework.
  - Flask will be utilized to create a restful API for all our back-end queries and requests.
    - Python will serve as the language that is required to use the Flask framework.
  - Cloud based MySQL database will be used to store our data.
  - Docker will be used for creating a container that serves as a virtual machine for our application deployment to AWS.



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- AWS will be our cloud service utilized for hosting our database on the cloud, deployment, domain routing, and computational services.
- The Scrum development process framework model will be adhered to in order to promote an agile work environment that optimizes work flow for small software development teams.

## Target Audience

- Our target audience encompasses any and all demographics in need of travel tickets, event tickets, and advice on planning for foreign locations/destinations. This may involve individuals in search of new locales to travel, families on vacation, or even business people in search of certain amenities.

## Risks/Opportunities

- Risks
  - Not delivering on the entire scope of the project by the project's due date
  - Not delivering a minimal viable product
  - Exposing user information that is meant to be private and therefore unexposed to outside viewing
- Opportunities
  - Expand knowledge related to software development in a professional environment using various technologies
  - Practice and perfect scrum development framework methods
  - Create comprehensive and useful software and deploy on the market



## Conclusion

- We aim to design, document, and deploy a median to maximal viable product by the end of our four sprints. Given the scope of our project, the effort required to be put forth will be more than minimal. However, given that we believe in the usefulness and demand for our web application, we look forward to proving we are capable of meeting the requirements all the while learning about software design and architecture.

## 2) Software Mission

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- The goal of this application is to provide a tool that hosts a wide variety of ticketing purchasing and review hosting/accessing services for those who are planning a trip to a destination.
- Our development team strives to produce a medium to maximum viable product (in the form of a web application) that will be painless to use, intuitive, useful, and feature rich.
- Our hope is to release a product that will be good enough to publish and obtain a sizeable following due to our product's quality.
- Virgil's Travels should work well with any computer and smartphone given that it will come in the form of a web application and will thusly support both platforms.



## 3) Sprint 3

---

### Process: Scrum Documents

#### Pointage Methodology

- The items that are placed on a backlog are often aspects of the application that are being developed by the team as features of the app in question. These features are often pulled from user stories, which serve as descriptions of features from the point of view of a user/potential clients of said application.
- As can be seen in the table graphic below (Figure 3b), the ideal story size is anything that lasts between 1-12 hours to develop or create.
- In terms of pointage, we will stick to a 1-10 rating scale where each point value is assigned based on the estimated on a function of estimated time for completion and difficulty. The table below (Figure 3a) shows how each point on the 10 point scale relates to estimated duration of item completion and difficulty.



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Point Value	Approx. Days / Hours	
1 pt.	1 Day ~ 6 hours or less	}
2 pts.	2 Days ~ 12 hours or less	
3 pts.	3 Days ~ 18 hours or less	}
5 pts.	4 Days ~ 30 hours or less	
8 pts.	5 Days (week) ~ 48 hours or less	}
13 pts.	10 Days (2 weeks) ~ 78 hours or less	
20 pts.	15 Days (3 weeks) ~ 120 hours or less	}
40 pts.	40 Days (6 weeks) ~ 240 hours or less	

Ideal Story Size

Break into smaller Story prior to Sprint (whiteboard)

Break into smaller Story during Refinement

Needs lots more Refinement

Figure 3a

Points	Estimated time for completion	Difficulty
1	1-2 hours	Easy
2	3-4 hours 1-2 hours	Easy Medium
3	5-6 hours 3-4 hours	Easy Medium
4	7-8 hours 5-6 hours 1-2 hours	Easy Medium Hard
5	9-10 hours 7-8 hours 3-4 hours	Easy Medium Hard
6	11-12 hours 9-10 hours 5-6 hours	Easy Medium Hard





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7	13-14 hours 11-12 hours 7-8 hours	Easy Medium Hard
8	15+ hours 13-14 hours 9-10 hours	Easy Medium Hard
9	15+ hours 11-12 hours	Medium Hard
10	13+ hours	Hard

Figure 3b

## Sprint Planning

- Purpose
  - Plan out the Backlog items for the next sprint session (3 weeks).
  - Create User stories for main feature: Flight search, and API integration
  - Create User Stories for peripheral, non-essential features' pages
  - Planned how to separate workload for each of the owners.
- Invitees
  - Required
    - CA - Clayton Asada
    - DI - David Ibarra
    - HM - Hector Mendoza
    - BM - Brandon Mitchell
    - BR - Bryan Rojas
  - Optional
    - Key Stakeholders
    - Other Classmates
- Agenda Item
  - Team Introductions
    - Clayton Asada - 1 minute
    - David Ibarra - 40 seconds
    - Hector Mendoza - 40 seconds
    - Brandon Mitchell - 1 minute 10 seconds
    - Bryan Rojas - 30 seconds
  - Agenda and Purpose
    - Sprint 3 Duration: October 14th, 2019 - November 4th, 2019
    - Overview



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- Work on core features including flight ticketing and searching.
- Work on User Interface elements, specifically the static footer elements.
- Dates checked in:
  - 10/14:
    - Sprint Planning Meeting
    - Missing members: None
  - 10/16:
    - Standard Check In
    - Missing members: None
  - 10/19:
    - Standard Check In
    - Missing members: David Ibarra
  - 10/21:
    - Work Display and feedback
    - Missing members: None
  - 10/23:
    - Standard Check In
    - Missing members: None
  - 10/28:
    - Standard Check In
    - Missing members: Clayton Asada
  - 10/29:
    - Standard Check In
    - Missing members: Bryan Rojas, Brandon Mitchell
  - 10/30:
    - Standard Check In
    - Missing members: None
  - 11/03:
    - Work Display and feedback
    - Missing members: Hector Mendoza
- Sprint User Stories
  - Have a static footer object persist through various pages
  - Add a Privacy Page
  - Add a Terms of Service Page
  - Add a Social Media
  - Add a Contact Us Page
  - Add a Frequently Asked Questions Page
  - Add an Accessibility Page
  - Add a Cookies Page
  - Add a Meet the Team Page



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- Add a Documentation Page
- Add an About Page
- Add Search Bar
- Add Flight Form
- Utilize and integrate Flights API
- Add Flight Filtering feature
- Add Flight Purchasing

## Product Backlog

### Bug list

Priority (1-5)	Bug Description	Owner	Created	Completed
3	clicking "User" from the navbar causes an error. InvalidTokenError: Invalid token	BR	10/27	10/28
2	Cannot read property 'replace' of undefined	DI	11/02	11/02
5	link to email on meet the team page was non functioning	BM	10/24	10/26
4	FAQ page has references items that are not on the page	DI	10/25	10/27
1	Contact information link to email (for Virgil's Travels) did not work	HM	11/03	11/03
2	Logout button did not work	CA	10/28	10/29
1	Register button was not able to query to Database	CA	11/02	11/03
3	Meet the team page took us to our error 404 page	BM	10/19	10/20
1	Searching for flights was inaccurate	BR	10/26	11/01
4	Images on meet the team overflowed when hovered over	BM	10/18	10/19
1	Flights API was not working correctly	DI	11/01	11/01



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## UI/UX Improvements

Priority (1-5)	Improvement Description	Owner	Created	Completed
1	Create black navigation bar	BR	10/18	10/18
1	Create black footer	HM	10/15	10/15
2	Add items to the footer	DI	10/16	10/16
4	Add image "VT_log.png" to Navigation bar	HM	10/30	10/30
5	Add images to social media links ("fb_icon.png", "ig_icon.png", "tw_icon.png")	CA	10/20	10/20
5	Add color #22b5ef (blue) to background of landing page	CA	11/01	11/01
5	Add color #131313 to nav-bar links (white	CA	11/01	11/01
2	Create generic "Card" component for meet the team page	BM	10/27	10/27
3	Add css to style "Card" component (shadow, overflow, padding, size, pixels)	BM	10/27	10/27
2	Add references to top of page in FAQ page	DI	11//03	11/03
2	Separate cards on meet the team section. Cards are now on grid in order of (4,4,4) x (4,4,4)	BM	10/25	10/25
4	Add images of group members to each card in meet the team section	BM	10/27	10/27
1	Add email address on each group member's card in meet the team section	BM	10/23	10/23



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## Sprint Backlog

Sprint	Size (Pointage)	Backlog Item	Owner	Estimated Hours	Actual Hours
3	3	As a user, I want a Privacy Page to view which basic privacies I am entitled to and which I will be revoking by using Virgil's Travels.	CA	3-4	4.25
3	3	As a user, I want a Terms of Service Page so that I know what the terms of service are.	BR	3-4	3.5
3	3	As a user, I want Various Social Media links so that I can contact the company/product owners in a public forum.	BM	3-4	3
3	3	As a user, I want a Contact Us Page so that I can contact the product/owners in a private fashion.	HM	3-4	3
3	4	As a user, I want a Frequently Asked Questions Page so that some of my questions that I may have can be answered prior to seeking direct contact.	DI	5-6	6
3	3	As a user, I want an Accessibility Page so that I know what features are accessible.	CA	3-4	3.5
3	3	As a user, I want a Cookies Page so that I know what the website's policies are like when it comes to the utilization of cookies and overall tracking.	BR	3-4	3
3	4	As a user, I want a Meet the Team Page so that I know who are the developers behind the product I am using.	BM	5-6	5.5
3	3	As a user, I want a Documentation Page so that I can track the progress and overall development process of the app.	HM	3-4	3
3	3	As a user, I want an About Virgil's Travels Page so that I can learn all about the app.	DI	3-4	3.25
3	3	As a user, I want a Search Bar so that	BR, CA	3-4	4.25



# VIRGIL'S TRAVELS

		I can search for flights.			
3	4	As a user, I want a Flight Form so that I can search for flights within the parameters that I input in the form.	BR	5-6	5
3	6	As a user, I want a Flights API so that I can use other services associated with flights like ticketing and price comparisons.	DI,BM	9-10	9.25
3	5	As a user, I want a Flight Filtering option so that I do not have to look at flights that I am not interested in.	HM	7-8	6.5

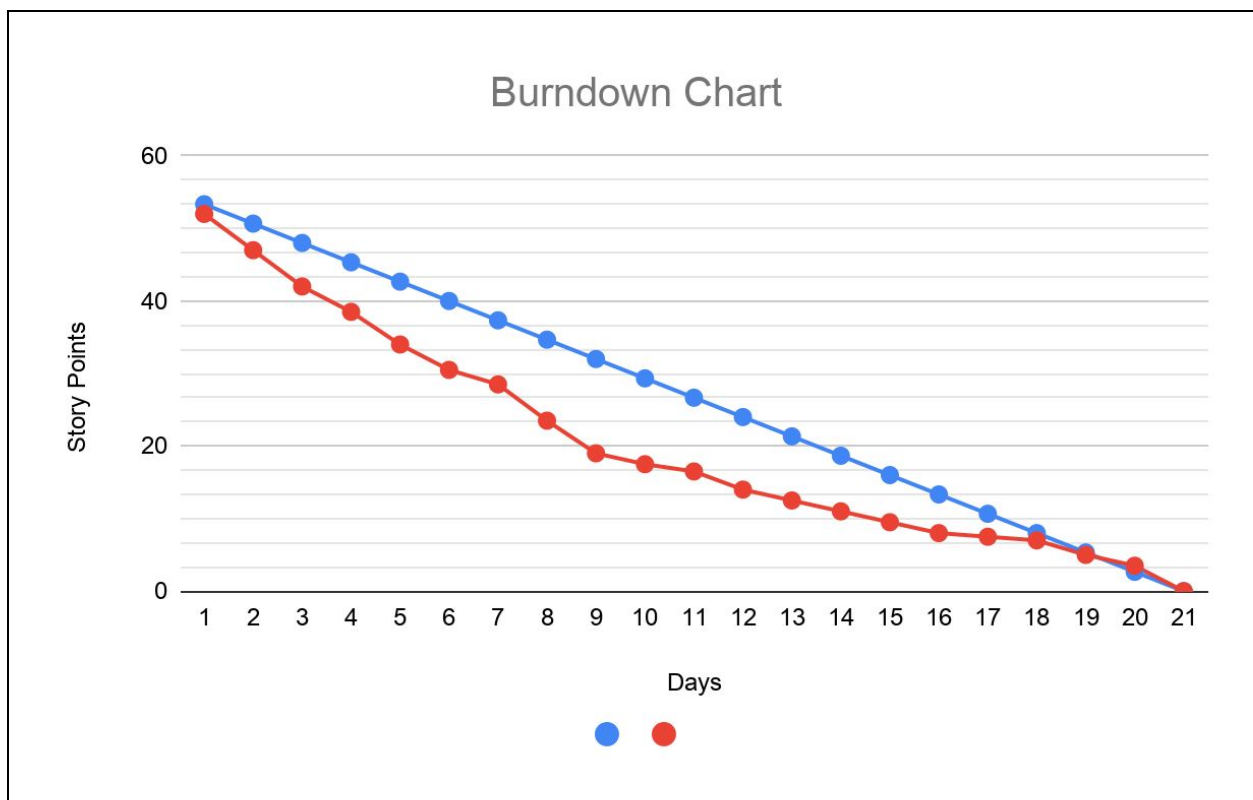
## Sprint Burndown Chart

Sprint Management Template			
Number of days	21		
starting story points	56		
Ideal burn-rate	2.67	current day sp	0
Everyday Updates			
day	ideal	actual burnt	velocity
1	53.33	52	1
2	50.67	47	5
3	48.00	42	5
4	45.33	38.5	3.5
5	42.67	34	4.5
6	40.00	30.5	3.5
7	37.33	28.5	2
8	34.67	23.5	5
9	32.00	19	4.5
10	29.33	17.5	1.5
11	26.67	16.5	1
12	24.00	14	2.5



# VIRGIL'S TRAVELS

13	21.33	12.5	1.5
14	18.67	11	1.5
15	16.00	9.5	1.5
16	13.33	8	1.5
17	10.67	7.5	0.5
18	8.00	7	0.5
19	5.33	5	2
20	2.67	3.5	1.5
21	0.00	0	3.5





# VIRGIL'S TRAVELS

## Sprint Review

- We reviewed the work done for sprint 3. The main goal of sprint 3 was to complete the peripheral pages associated with a website, all located in the footer of every page, and at least one of the core functions, flights.
- During our 3 hour sprint review, we each presented to the group what we had worked on. Each group member demonstrated two pages from the footer that they had created and populated with pertinent information (contact us, about VT, privacy policy, etc.)
- During the collaboration phase we decided that the aesthetics and foundational aspects of the website had been established, meeting our quality standards, and that the next sprint would consist of the core functionality. The items in our sprint 4 backlog reflect this decision.

## Sprint Retrospective

- What went well during the sprint?
  - The sprint allowed all members of the group to work on multiple aspects of the project and further familiarize themselves with the software and coding languages being utilized. All participants agreed that the final products presented to the group were consistent with the envisioned results from the beginning of sprint 3 and would not need further work.
- What did not go well?
  - In terms of efficiency, all group members were still getting their legs under themselves when working with the incorporated technologies. This in turn meant that more time than necessary was spent on aspect that would be relatively easy for seasoned professionals.
- What could be improved for better productivity next sprint?
  - Continued studying and hands on experience with the technology stack utilized in development of Virgil's Travels will increase the team's productivity. As it stands, a lot of trial and error has caused the team to take a long time to develop core and peripheral features.

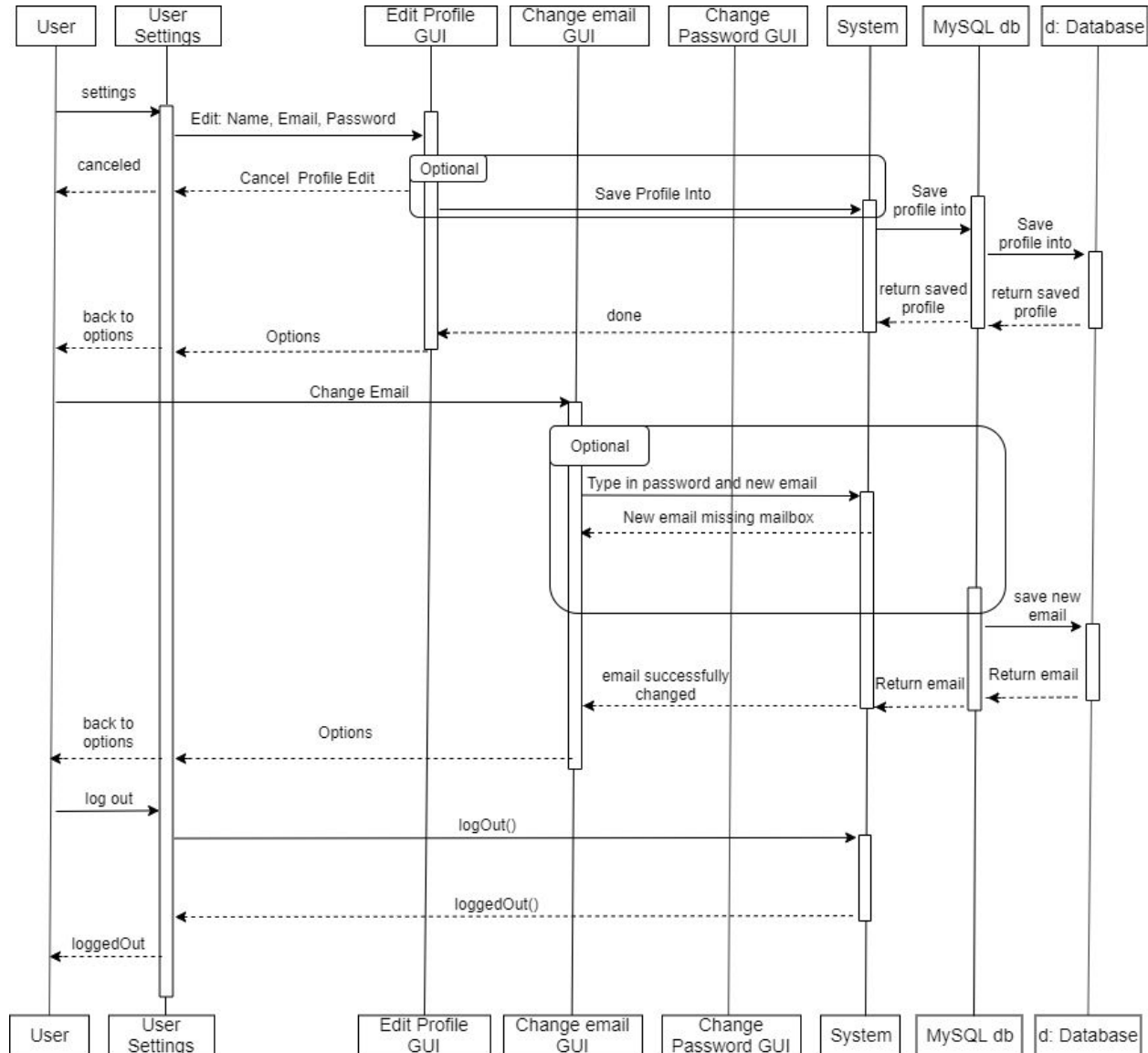




# VIRGIL'S TRAVELS

## Software Architecture

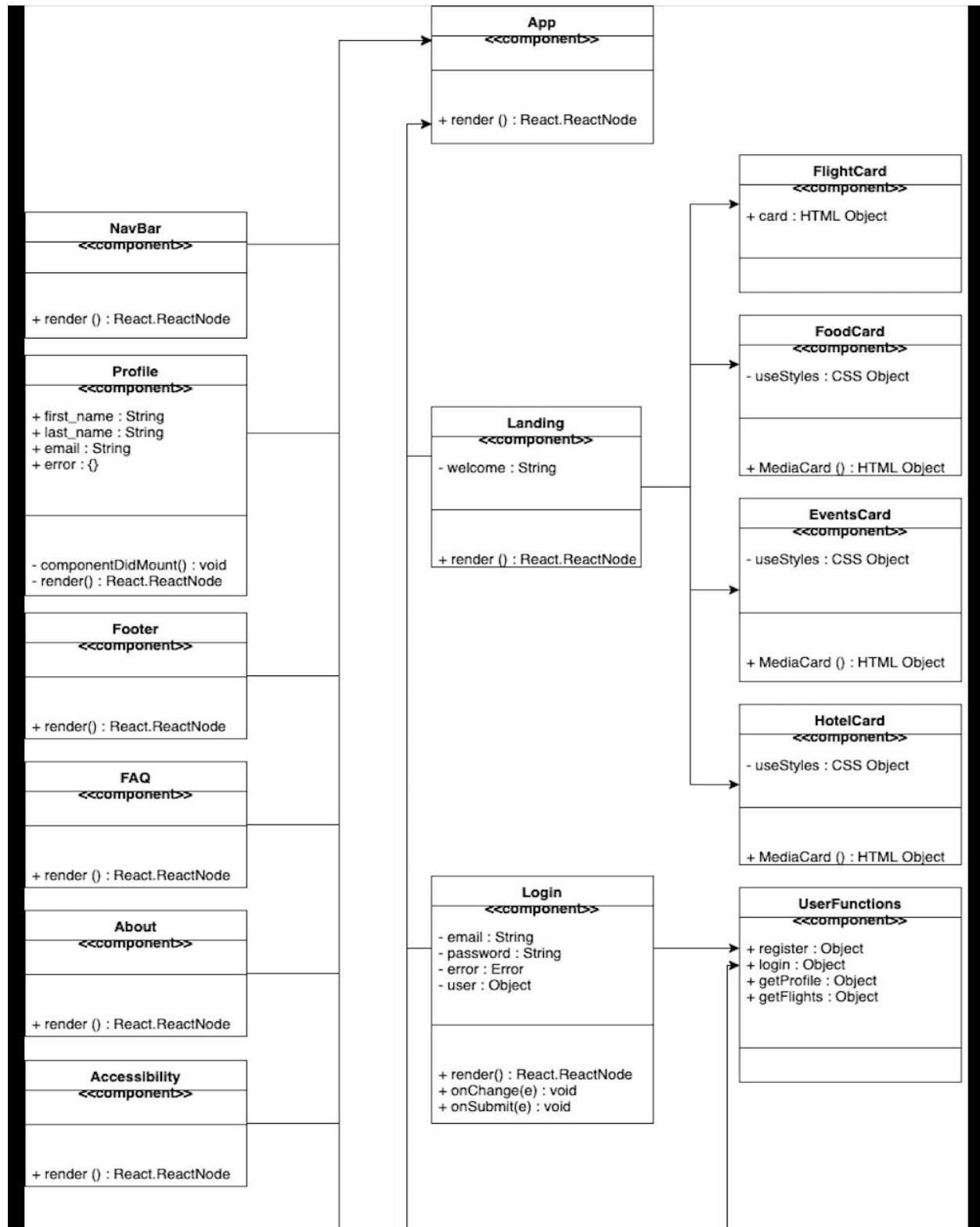
### Sequence Diagram





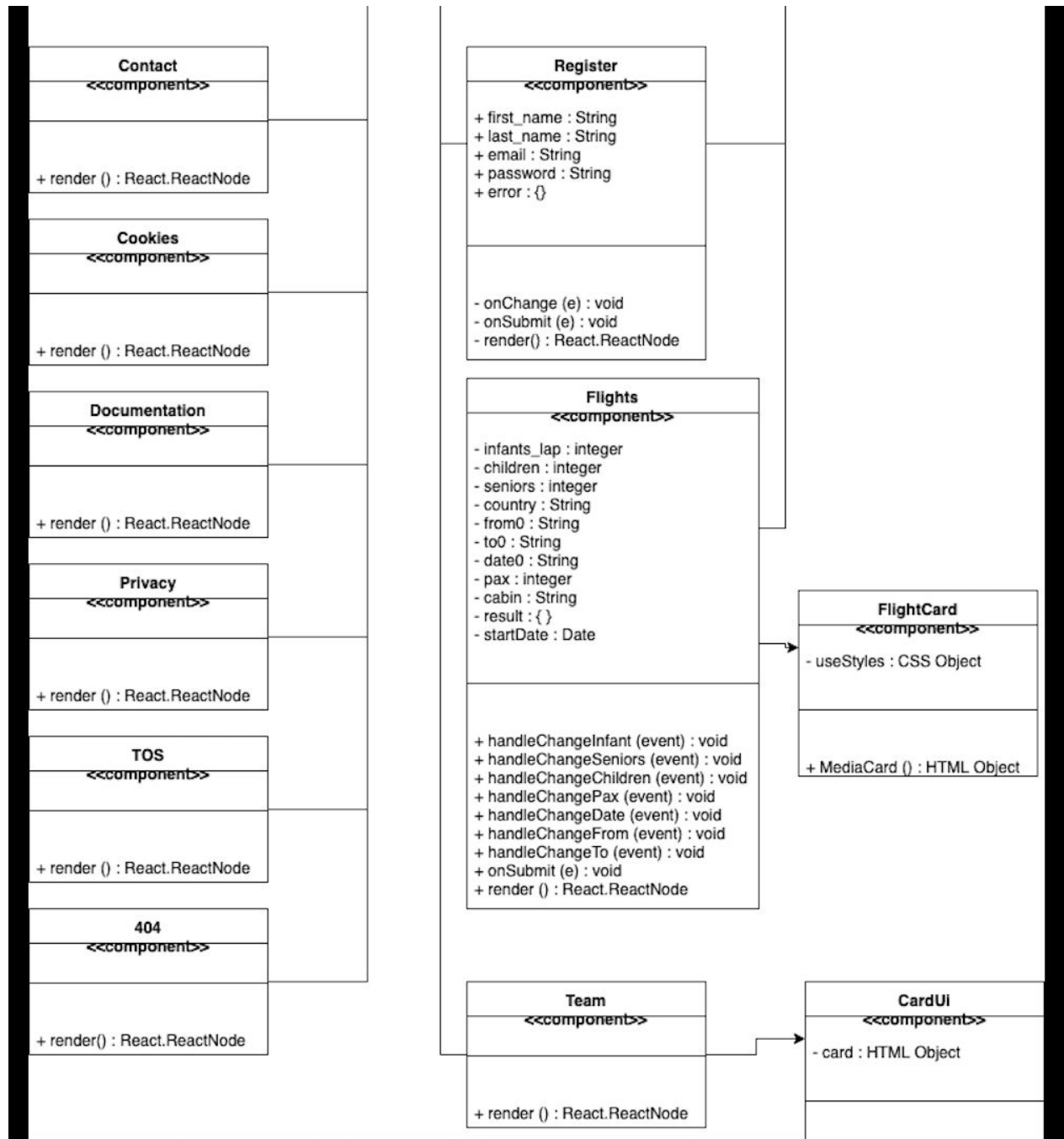
# VIRGIL'S TRAVELS

## Class Diagram





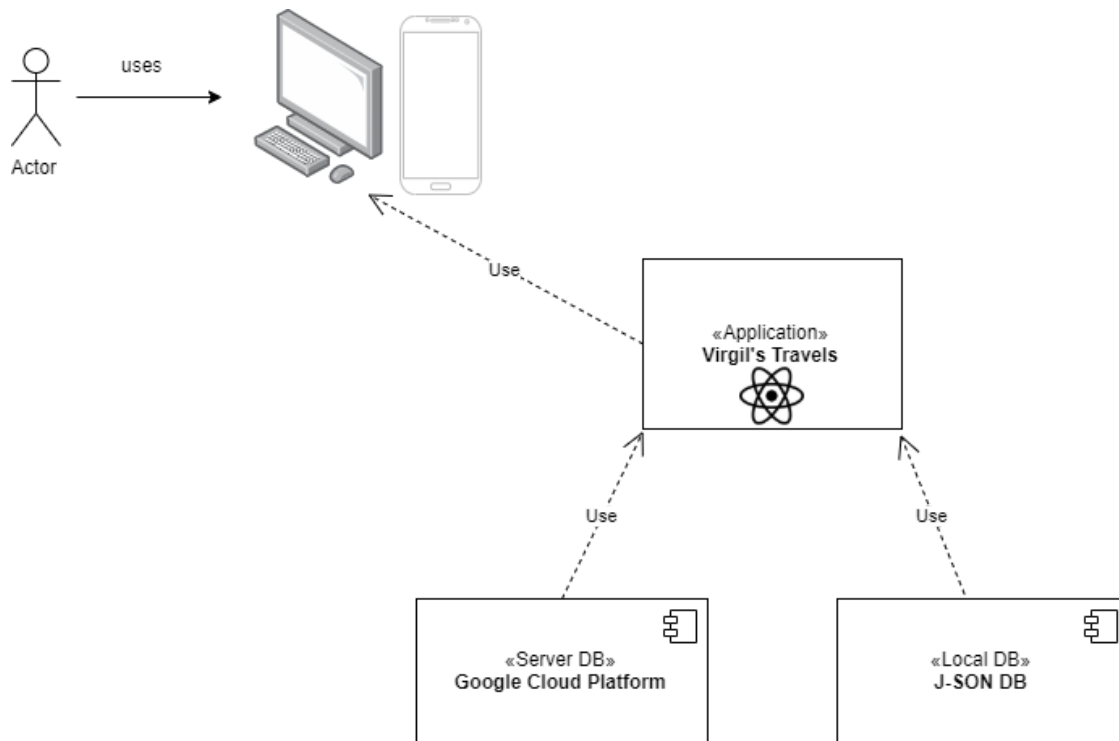
# VIRGIL'S TRAVELS





# VIRGIL'S TRAVELS

## Deployment View Diagram



## Software Development

In this project we used JavaScript, the React framework, CSS, HTML in creating the frontend. We the JavaScript to utilize the React framework. For the backend of our project we used Python, the Flask framework, and MySQL. Cloud based MySQL was used for our database, Python and Flask were used to link to the API's for the flight search, event search, dining searches, and reviews of places, events, restaurants etc. Flask was utilized to create an API for our backend queries and requests. We used Docker to create a container for our site. Docker is a set of platform as a service products that use OS-level virtualization to deliver software in packages called containers. Containers are isolated from one another and bundle their own software, libraries and configuration files; they can communicate with each other through well-defined channels. React will be used for front-end and it'll be used as the view of our application. We used our user stories as guides to create our front end components. We strived to keep our user stories small in order to make the components easier to create.



## Software Quality

### UI Overview

Test number	Description	Tester	Date created	Pass/Fail
1	Users can clearly see all text on the home page	HM	11/04	Pass
2	Features Drop Down fully functional	BR	11/04	Fail
3	VT button on top left directs AND home button on top middle directs to home page	BR	11/04	Pass
4	Profile button directs to profile page	DI	11/04	Pass
5	Footer links direct to corresponding footer pages	DI	11/04	Pass
6	Images are aesthetically pleasing	CA	11/04	Pass
7	Background wallpaper element does not obstruct foreground element	CA	11/04	Pass
8	Search Flights button redirects to Flights form	BM	11/04	Pass
9	Hovering over Flights button does not worsen the text	BM	11/04	Fail
10	User input fields (text/dropdown) all function and retain information	BM	11/04	Pass
11	Search flights button successfully redirects via API call	HM	11/04	Pass

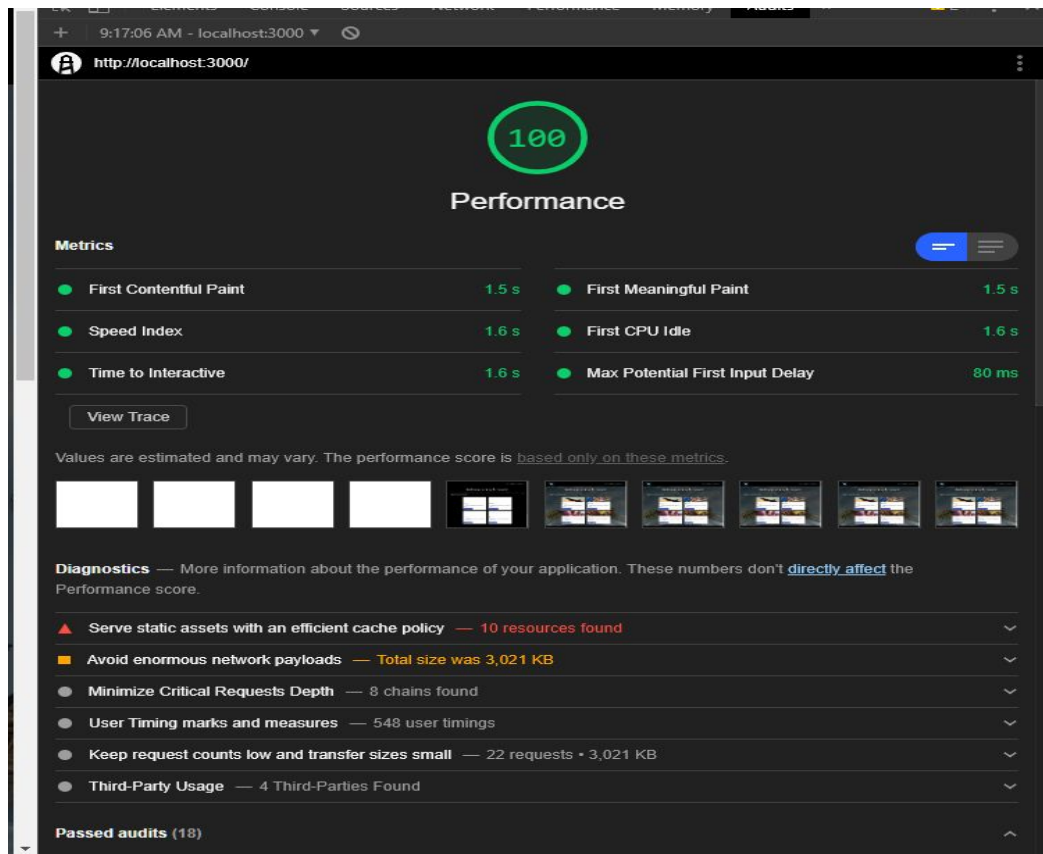
### UX Overview

We used no outside testers or user experiences for sprint 3. All of our testing was done within our own group. This was due to a lack of outside sources and our website only being hosted locally. Therefore, for the UX overview we used our experience with other websites and compared how our app looked in accordance to the higher standards of reputable sites.

### Performance Testing



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## Efficiency Testing

Test number	Description	Tester	Date created	Pass/Fail
1	Flights Search API quickly takes user to Hipmunk	BM	11/15	Pass
2	Hotels Search API is functioning quickly to Hipmunk	CA	11/13	Pass
3	Events Search API pulls up options on the VT page efficiently	HM	11/29	Pass
4	Food Search API pulls dining options on the VT page in 20 seconds	BR	11/19	Pass



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5	Features are accessible from the navigation bar and home page	DI	11/08	Pass
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98

## Accessibility

These checks highlight opportunities to [improve the accessibility of your web app](#). Only a subset of accessibility issues can be automatically detected so manual testing is also encouraged.

**Contrast** — These are opportunities to improve the legibility of your content.

- ▲ Background and foreground colors do not have a sufficient contrast ratio.

**Additional items to manually check (11)** — These items address areas which an automated testing tool cannot cover. Learn more in our guide on [conducting an accessibility review](#).

**Passed audits (19)**

**Not applicable (15)**

### Runtime Settings

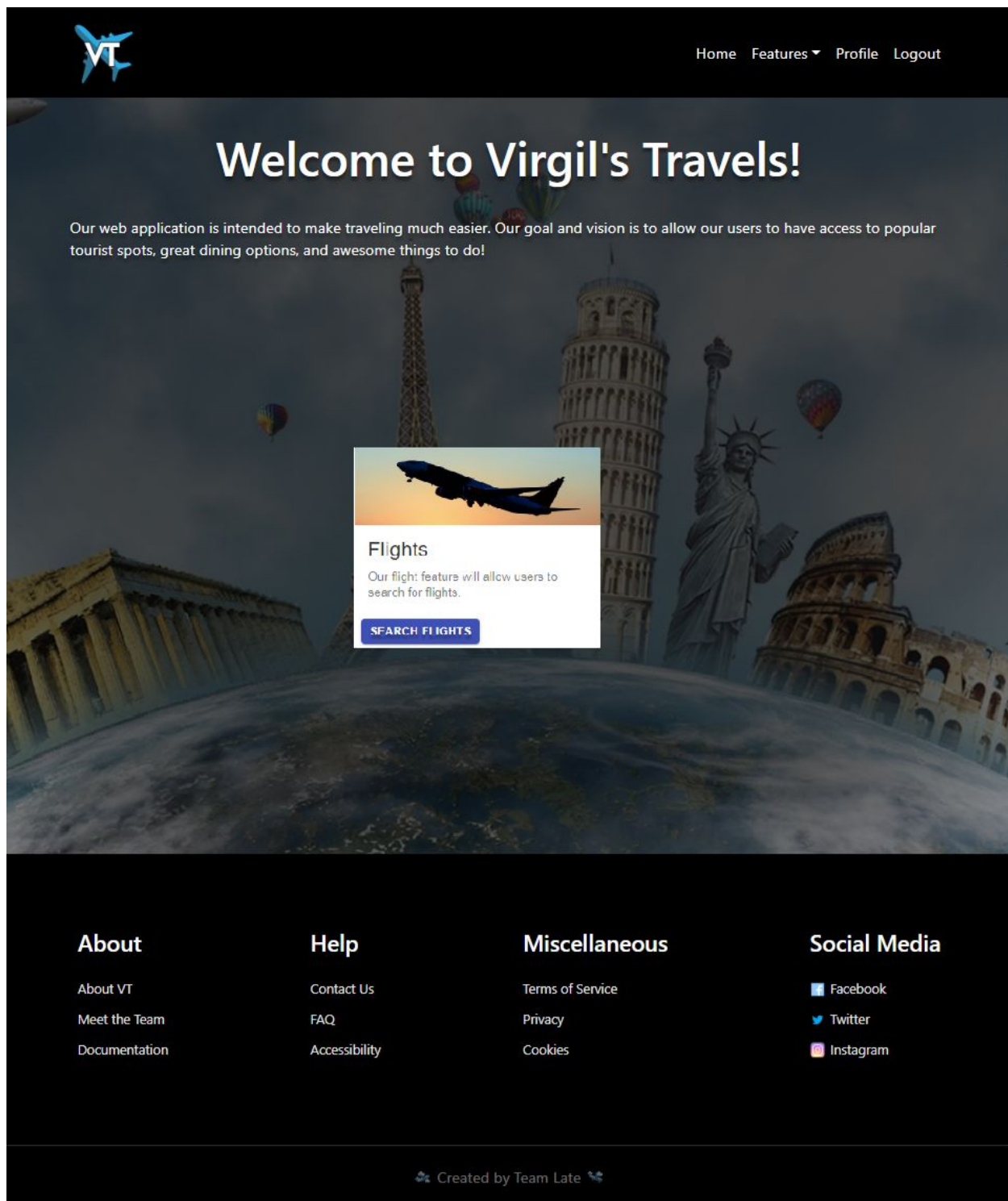
URL	http://localhost:3000/
Fetch time	Dec 2, 2019, 9:27 AM PST
Device	Emulated Desktop
Network throttling	Provided by environment
CPU throttling	Provided by environment





# VIRGIL'S TRAVELS

## Prototype/Products







## Flights Search

Adult

1 ▾

Children

0 ▾

Seniors

0 ▾

Infants

0 ▾

Departure date:

[SEARCH FLIGHTS](#)

### About

[About VT](#)[Meet the Team](#)[Documentation](#)

### Help

[Contact Us](#)[FAQ](#)[Accessibility](#)

### Miscellaneous

[Terms of Service](#)[Privacy](#)[Cookies](#)

### Social Media

 [Facebook](#) [Twitter](#) [Instagram](#)



## Frequently Asked Questions

### Account

1. [I forgot my password, what do I do?](#)
2. [My account has been compromised! How do i regain access?](#)
3. [I forgot my email, what do I do?](#)

### General

1. [What is Virgil's Travels?](#)
2. [How can I help support Virgil's Travels?](#)
3. [Does Virgil's Travels work on mobile?](#)
4. [Do you offer Live Chat Support?](#)
5. [How do I write a review on a location I have visited?](#)
6. [My destination does not have information, what do I do now?](#)
7. [Why are you named "Virgil's Travels"?](#)

### Account

Q:

**I forgot my password, what do I do?**

A:

This is a common mistake and there is no need to worry. The easiest way to regain access to your password is:

1. Go to the website's home page and select the login/create account on the top right corner.
2. Click on forgot password. The link should be under the login credentials.
3. Enter your email.



## Terms of Service

### Website terms of use

The Virgilstravels website located at virgilstravels.com is a copyrighted work belonging to Virgil's Travels. Certain features of the Site may be subject to additional guidelines, terms, or rules, which will be posted on the Site in connection with such features.

All such additional terms, guidelines, and rules are incorporated by reference into these Terms.

These Terms of Use described the legally binding terms and conditions that oversee your use of the Site. BY LOGGING INTO THE SITE, YOU ARE BEING COMPLIANT THAT THESE TERMS and you represent that you have the authority and capacity to enter into these Terms. YOU SHOULD BE AT LEAST 18 YEARS OF AGE TO ACCESS THE SITE. IF YOU DISAGREE WITH ALL OF THE PROVISION OF THESE TERMS, DO NOT LOG INTO AND/OR USE THE SITE.

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## 4) Sprint 4

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### Process: Scrum Documents

#### Sprint Planning

- Purpose
  - Plan out the Backlog items for the next sprint session (3 weeks).
  - Create User stories for main features: Hotel, Event, Rental car, and Dining search, and API integration
  - Create User Stories for core essential features' pages
  - Planned how to separate the workload for each of the owners.
- Invitees
  - Required
    - CA - Clayton Asada
    - DI - David Ibarra
    - HM - Hector Mendoza
    - BM - Brandon Mitchell
    - BR - Bryan Rojas
  - Optional
    - Key Stakeholders
    - Other Classmates
- Agenda Item
  - Team Introductions
    - Clayton Asada - 45 seconds
    - David Ibarra - 1 minute
    - Hector Mendoza - 40 seconds
    - Brandon Mitchell - 1 minute
    - Bryan Rojas - 40 seconds
  - Agenda and Purpose
    - Sprint 4 Duration: November 4th, 2019 - November 25th, 2019
    - Overview
      - Work on core features
        - Hotel searching and filtering
        - Car Rental searching and filtering
        - Event searching and filtering
        - Dining searching and filtering
        - Review viewing and filtering
  - Dates checked in:



# VIRGIL'S TRAVELS

- 11/04:
    - Sprint Planning Meeting
    - Missing members: None
  - 11/06:
    - Standard Check In
    - Missing members: None
  - 11/11:
    - Standard Check In
    - Missing members: Clayton Asada
  - 11/13:
    - Work Display and feedback
    - Missing members: None
  - 11/18:
    - Standard Check In
    - Missing members: Hector Mendoza, David Ibarra
  - 11/20:
    - Standard Check In
    - Missing members: Brandon Mitchell
  - 11/23:
    - Standard Check In
    - Missing members: Bryan Rojas
  - 11/25:
    - Work Display and feedback
    - Missing members: none
- Sprint user Stories

## Product Backlog

### Bug List

Priority (1-5)	Bug Description	Owner	Created	Completed
5	Upper left Virgil's Travels Icon redirects to the Cookies page	BR	11/11	11/11
3	Main features panels do not resize properly	CA	11/20	11/22
2	Upper right Features dropdown menu won't appear	BM, BR	11/14	11/15
4	Descriptions for Flights and Food mixed up	HM, DI	11/21	11/21
1	Able to search for 0 adults/infants/seniors	BR	11/23	11/26



# VIRGIL'S TRAVELS

1	Calendar pop up won't show up	BR	11/06	11/07
4	Home button inactive/doesn't do anything	HM,DI	11/11	11/11
1	Certain food types not recognized leads to app breaking	CA	11/20	11/25

## UI/UX Improvements

Priority (1-5)	Improvement Description	Owner	Created	Completed
1	Media Queries implemented to ensure all components scaled properly	CA	11/21	11/21
3	Core feature forms homogenized across the board by having material ui color scheme	HM	11/24	11/24
1	Home page now implements cards to link and describe each core feature.	HM	11/20	11/21

## Sprint Backlog

Sprint	Size (Pointage)	Backlog Item	Owner	Estimated Hours	Actual Hours
4	4	Hotels Form	DI	5-6	6
4	6	Hotels API	HM, CA	9-10	10
4	5	Hotel Filtering	CA	7-8	7
4	4	Dining Form	HM	5-6	5.5
4	6	Dining API	BR	9-10	9
4	5	Dining Filtering	BM, DI	7-8	6.5
4	5	Events Form	CA	7-8	6
4	5	Events API	CA, BM	7-8	8.5
4	5	Events Filtering	BM	7-8	7.5
4	5	Car Rental Form	DI	7-8	6



# VIRGIL'S TRAVELS

4	5	Car Rental API	DI, BR, CA, HM, BM	7-8	16
4	5	Car Rental Filtering	BR	7-8	0
4	4	Review View	HM	5-6	6

## Sprint Burndown Chart

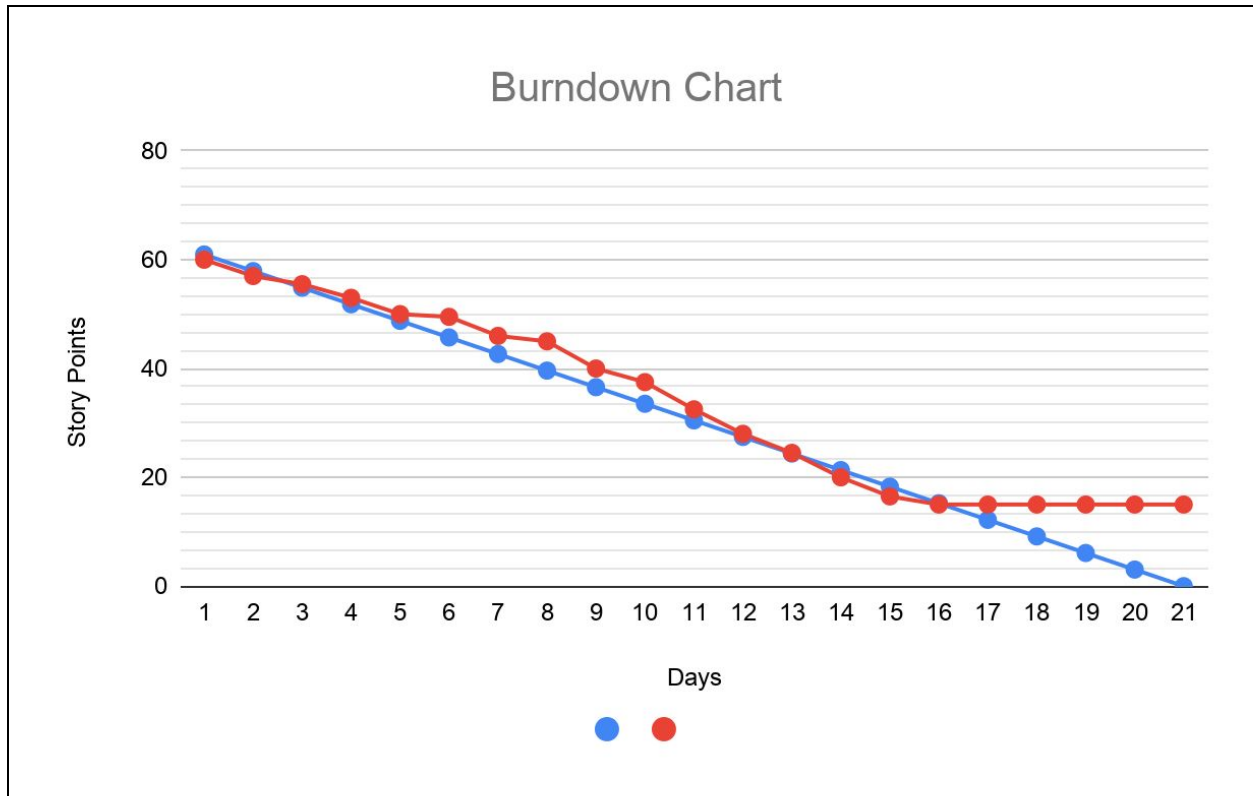
Sprint Management Template				
Number of days	21			
starting story points	64			
Ideal burn-rate	3.05	current day sp	15	
Everyday Updates				
day	ideal	actual burnt	velocity	
1	60.95	60	5	
2	57.90	57	3	
3	54.86	55.5	1.5	
4	51.81	53	2.5	
5	48.76	50	3	
6	45.71	49.5	0.5	
7	42.67	46	3.5	
8	39.62	45	1	
9	36.57	40	5	
10	33.52	37.5	2.5	
11	30.48	32.5	5	
12	27.43	28	4.5	
13	24.38	24.5	3.5	
14	21.33	20	4.5	
15	18.29	16.5	3.5	
16	15.24	15	1.5	
17	12.19	15	0	
18	9.14	15	0	
19	6.10	15	0	





# VIRGIL'S TRAVELS

20	3.05	15	0
21	0.00	15	0



## Sprint Review

- We reviewed what work was done for sprint 4. The main goal of sprint 4 was to complete the core functionality of Virgil's Travels, ie hotels, events, dining, and car rentals.
- During our 2 and a half hour sprint review, we each presented to the group what we had worked on. Each group member demonstrated the portion of the core functionality that they had worked on and completed. For each group member this consisted of the form page for users to enter their search criteria for a particular aspect(flights, hotels, events, cars, and dining) and the page of results matching the users search criteria
- During the collaboration phase we decided that core functionalities that were completed did meet our standards and were suitable, as is, to be live on the website. The items that were not completed were discussed and a new backlog as been completed if the team would like to continue working on the project.





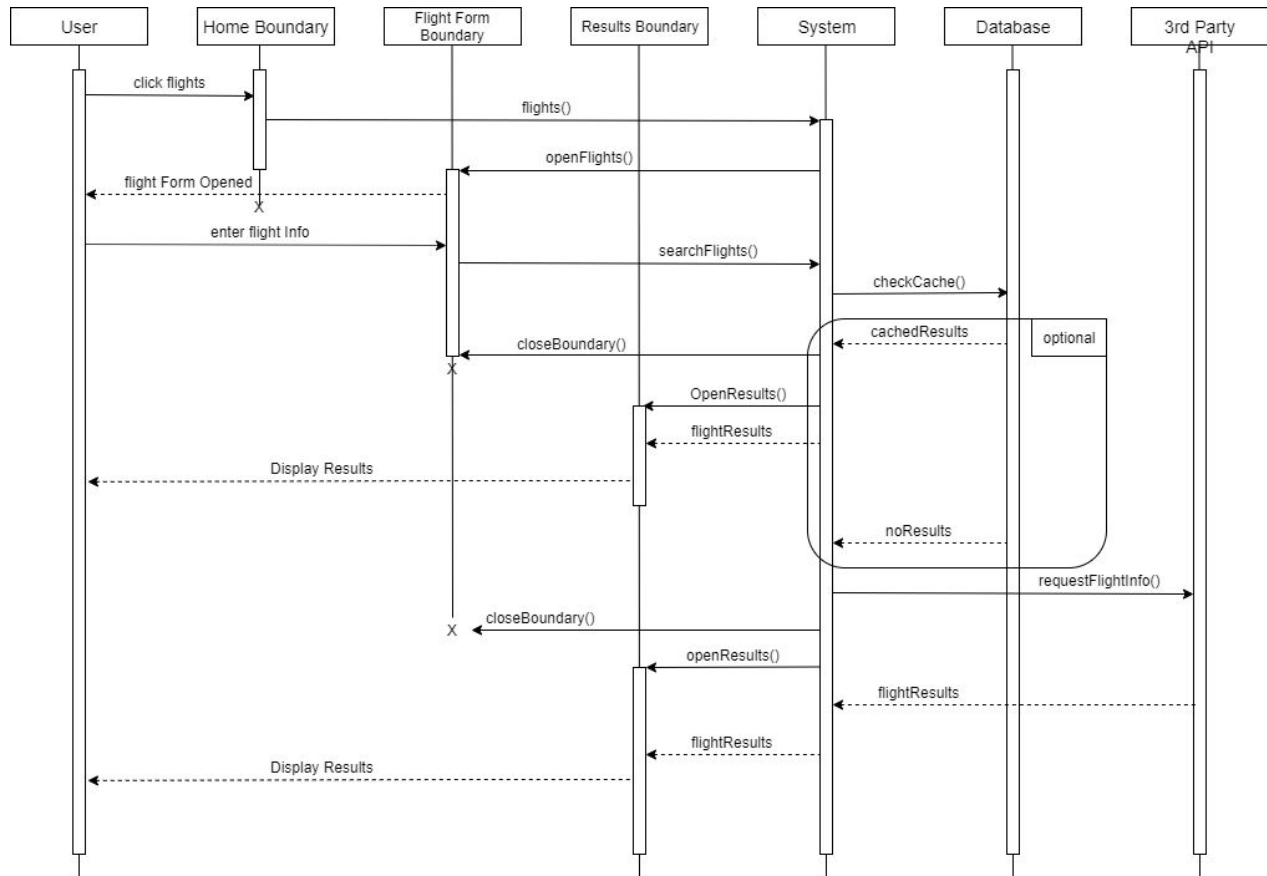
## Sprint Retrospective

- What went well during the sprint?
  - The sprint allowed for all members of the group to work on the project both as individuals and pairs to complete their assigned portions of the project. In addition each member gained further experience and knowledge by working with HTML, javascript, React, Flask, AWS, Docker, and github. Lastly, each group member agreed that the final products presented to the group were consistent with the envisioned results from the beginning of sprint 4 and would not need further work.
- What did not go well?
  - Time constraints coupled with having to change API implementations led to having to reduce the scope of our product. The first limitation we encountered was the Skyscanner API though sufficient enough for our first iteration of the app during Sprint 3, proved not to be enough for the entire ticketing process. This meant time was spent searching for alternative APIs that could provide flight details, pricing, and URL's. This being said, Hipmunk was an adequate alternative, even if it took the team longer to find and implement the API for flights and hotels core features. Secondly, car rental core feature proved to be too taxing to implement. Despite having the entire team research the implementation, substantial more work would have to be done and at the cost of the other features so that was scrapped. Likewise, administrative features were not completed.



## Software Architecture

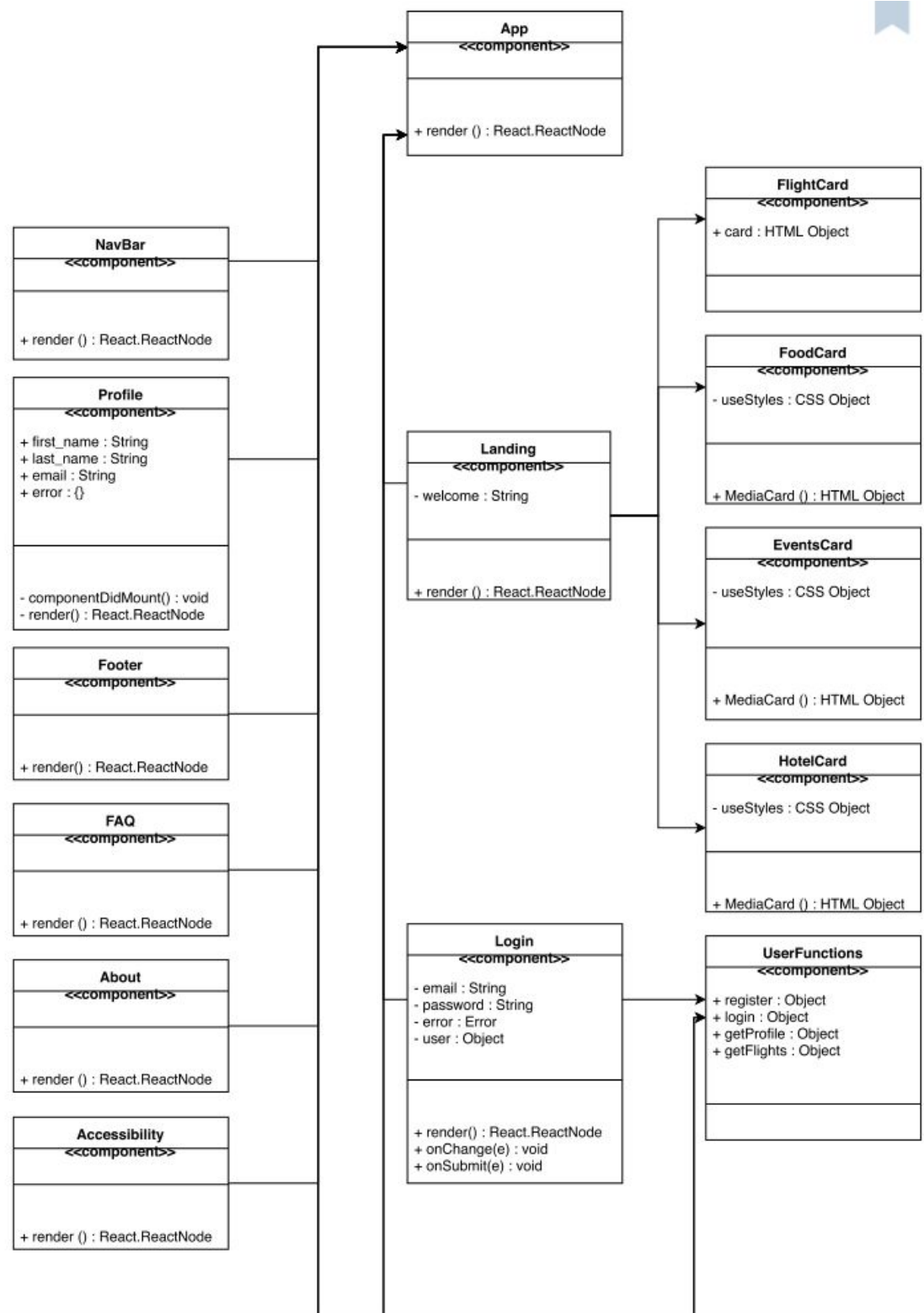
### Sequence Diagram





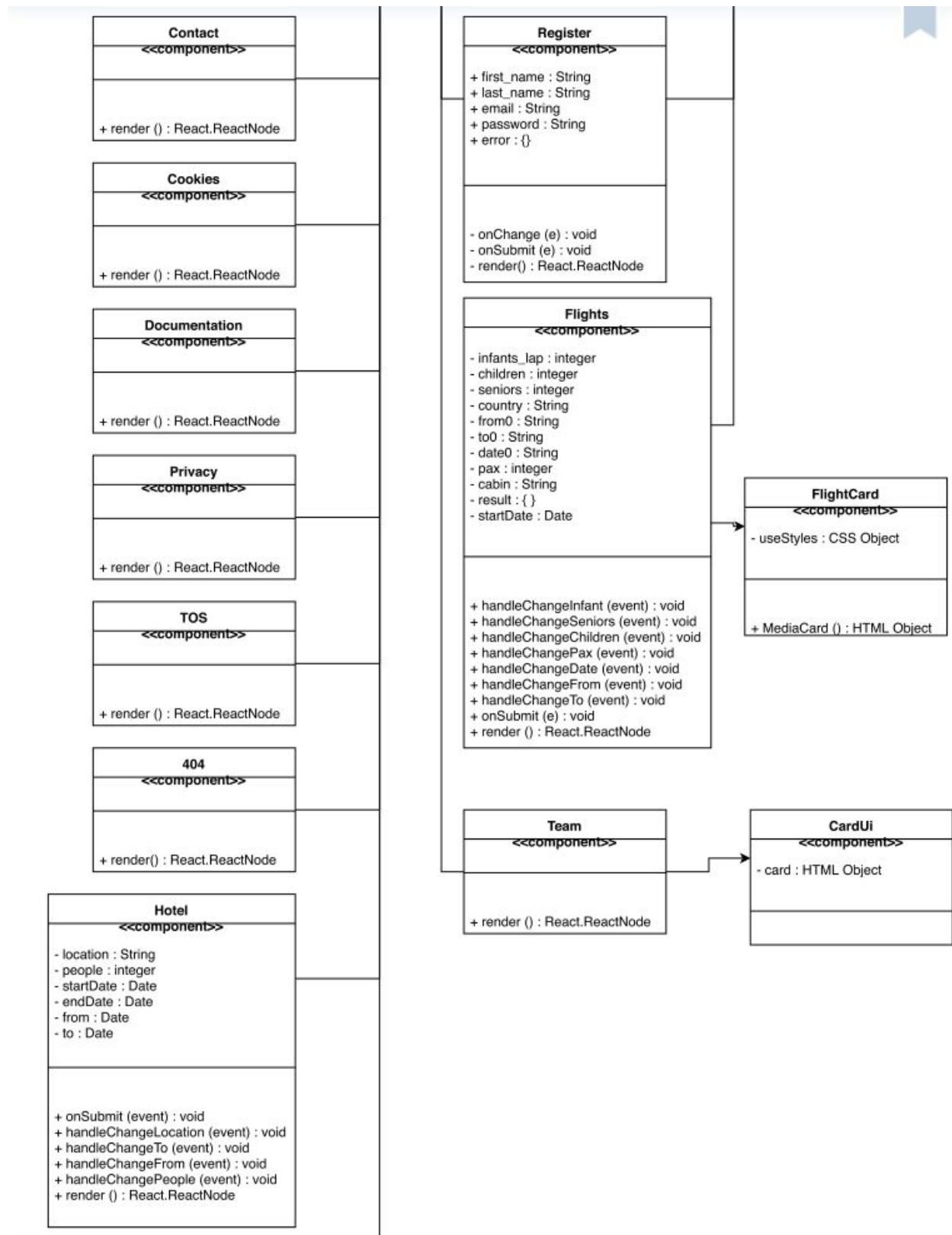
# VIRGIL'S TRAVELS

## Class Diagram



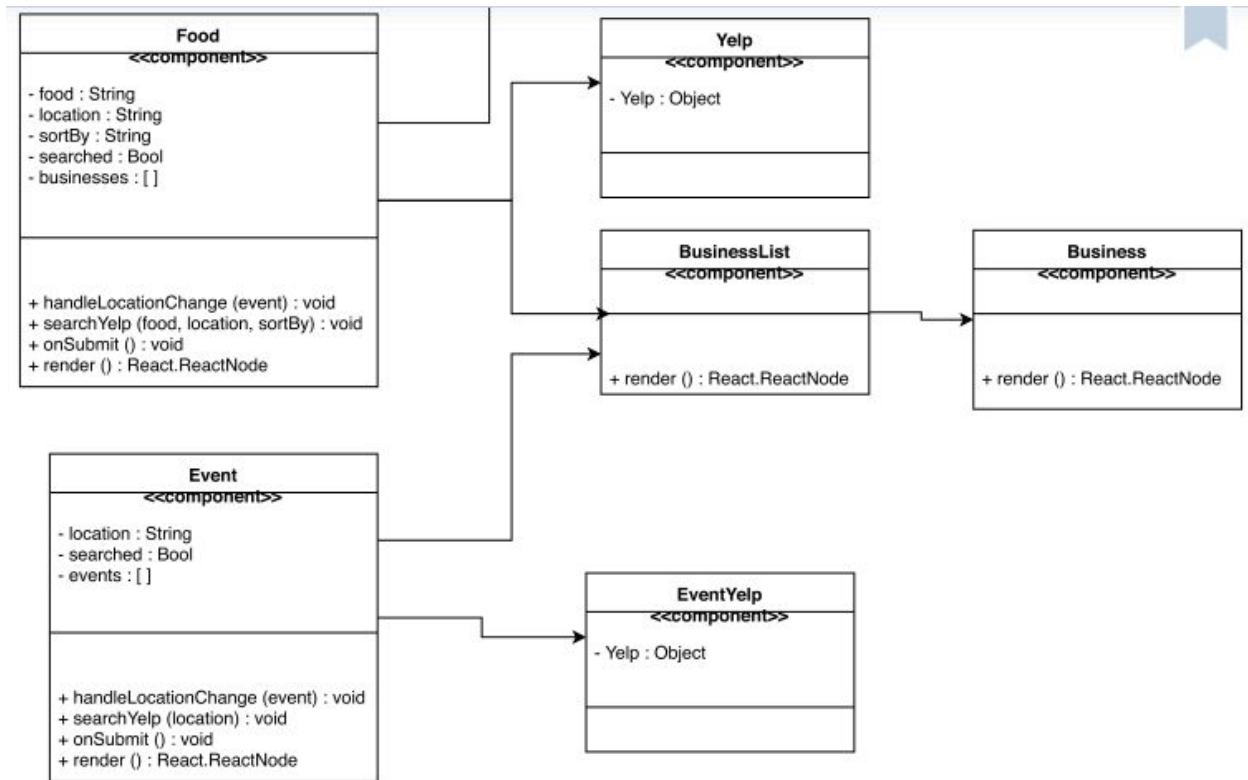


# VIRGIL'S TRAVELS

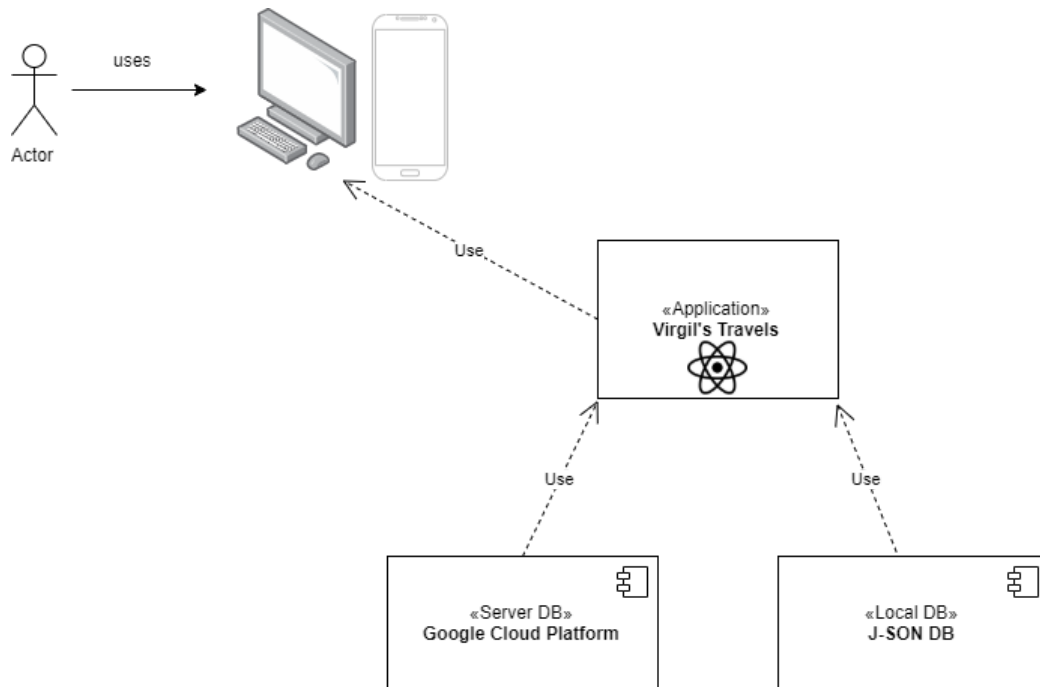




# VIRGIL'S TRAVELS



## Deployment View Diagram





## Software Development

In this project we used JavaScript, the React framework, CSS, HTML in creating the frontend. We the JavaScript to utilize the React framework. For the backend of our project we used Python, the Flask framework, and MySQL. Cloud based MySQL was used for our database, Python and Flask were used to link to the API's for the flight search, event search, dining searches, and reviews of places, events, restaurants etc. Flask was utilized to create an API for our backend queries and requests. We used Docker to create a container for our site. Docker is a set of platform as a service products that use OS-level virtualization to deliver software in packages called containers. Containers are isolated from one another and bundle their own software, libraries and configuration files; they can communicate with each other through well-defined channels. React will be used for front-end and it'll be used as the view of our application. We used our user stories as guides to create our front end components. We strived to keep our user stories small in order to make the components easier to create.

## Software Quality

### UI Overview

Test number	Description	Tester	Date created	Pass/Fail
1	Users can clearly see all text on the home page	DI	11/20	Pass
2	Features Drop Down fully functional	DI	11/25	Pass
3	VT button on top left directs AND home button on top middle directs to home page	DI	11/25	Pass
4	Profile button directs to profile page	DI	11/25	Pass
5	Footer links direct to corresponding footer pages	CA	11/25	Pass
6	Images are aesthetically pleasing	CA	11/25	Pass
7	Background wallpaper element does not obstruct foreground element	CA	11/25	Pass
8	Search Flights button redirects to Flights form	BM	11/25	Pass
9	Hovering over Flights button does not worsen the text	BM	11/25	Fail
10	User input fields (text/dropdown) on Flights form all function and retain information	BM	11/25	Pass



# VIRGIL'S TRAVELS

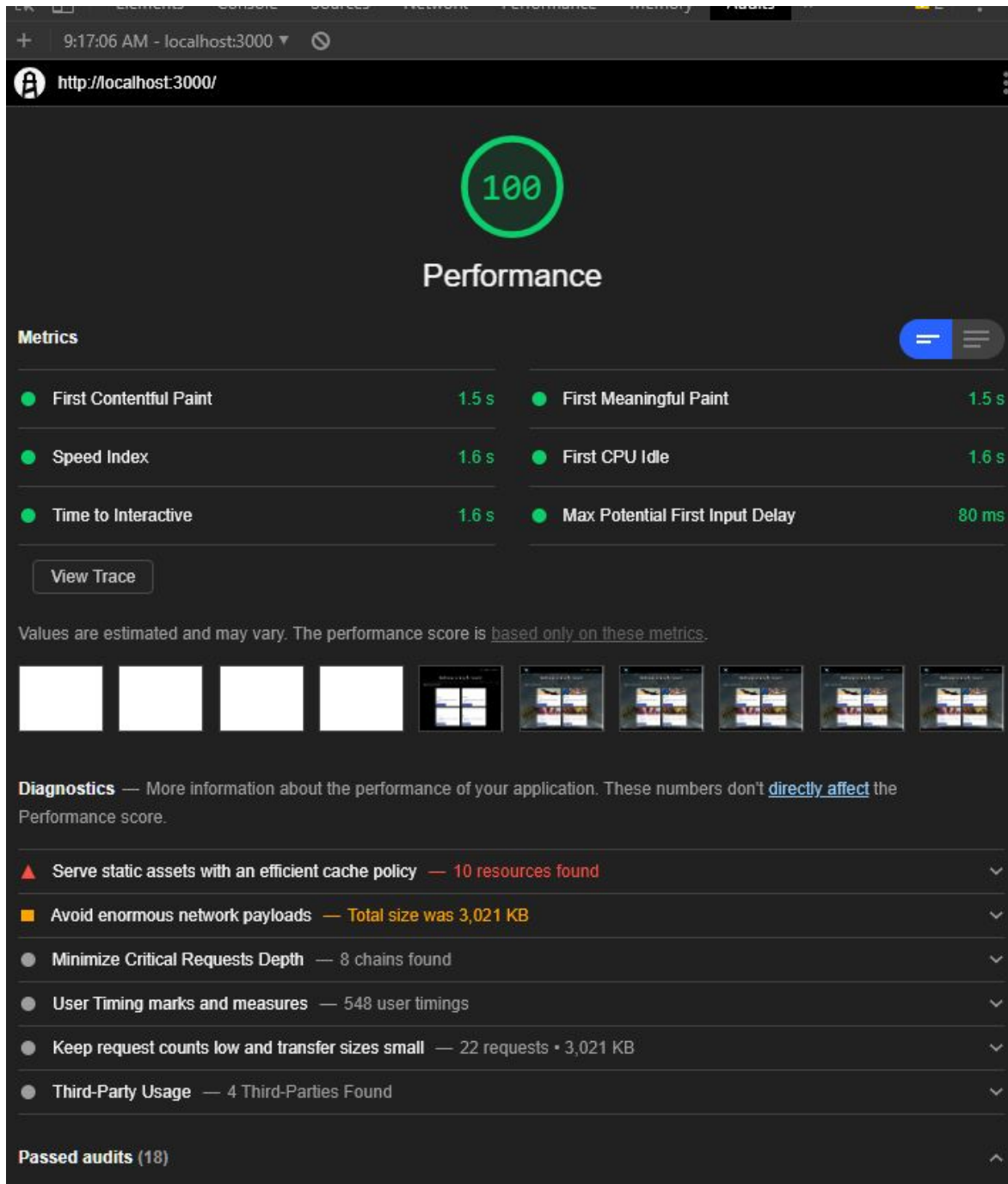
11	Search flights button successfully redirects via API call	BM	11/25	Pass
12	Search Hotels button redirects to Hotels form	HM	11/25	Pass
13	User input fields (text/dropdown) on Hotels form all function and retain information	HM	11/25	Pass
14	Search hotels successfully redirects via API call	HM	11/25	Pass
15	Search Events button redirects to Events form	BR	11/25	Pass
16	User Input field on Events form functions and retains information	BR	11/25	Pass
17	Search events successfully redirects via API call	BR	11/25	Pass
18	Search Food button redirects to Food form	BR	11/25	Pass
19	User input fields on Food form all function and retain information	BR	11/25	Pass
20	Search Food successfully redirects via API call	BR	11/25	Pass

## UX Overview

We used no outside testers or user experiences for sprint 3. All of our testing was done within our own group. This was due to a lack of outside sources and our website only being hosted locally. Therefore, for the UX overview we used our experience with other websites and compared how our app looked in accordance to the higher standards of reputable sites.



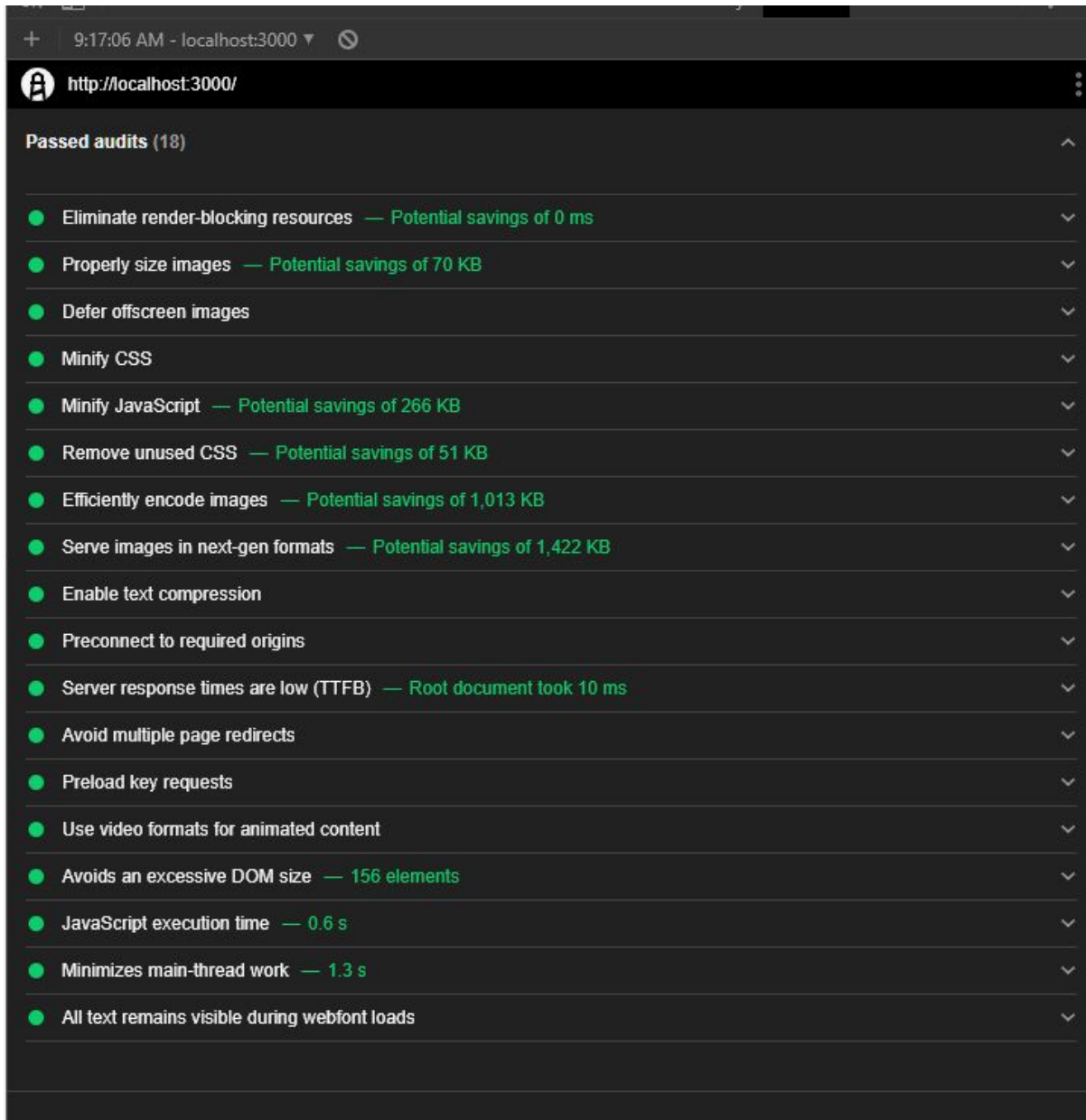
## Performance Testing







# VIRGIL'S TRAVELS



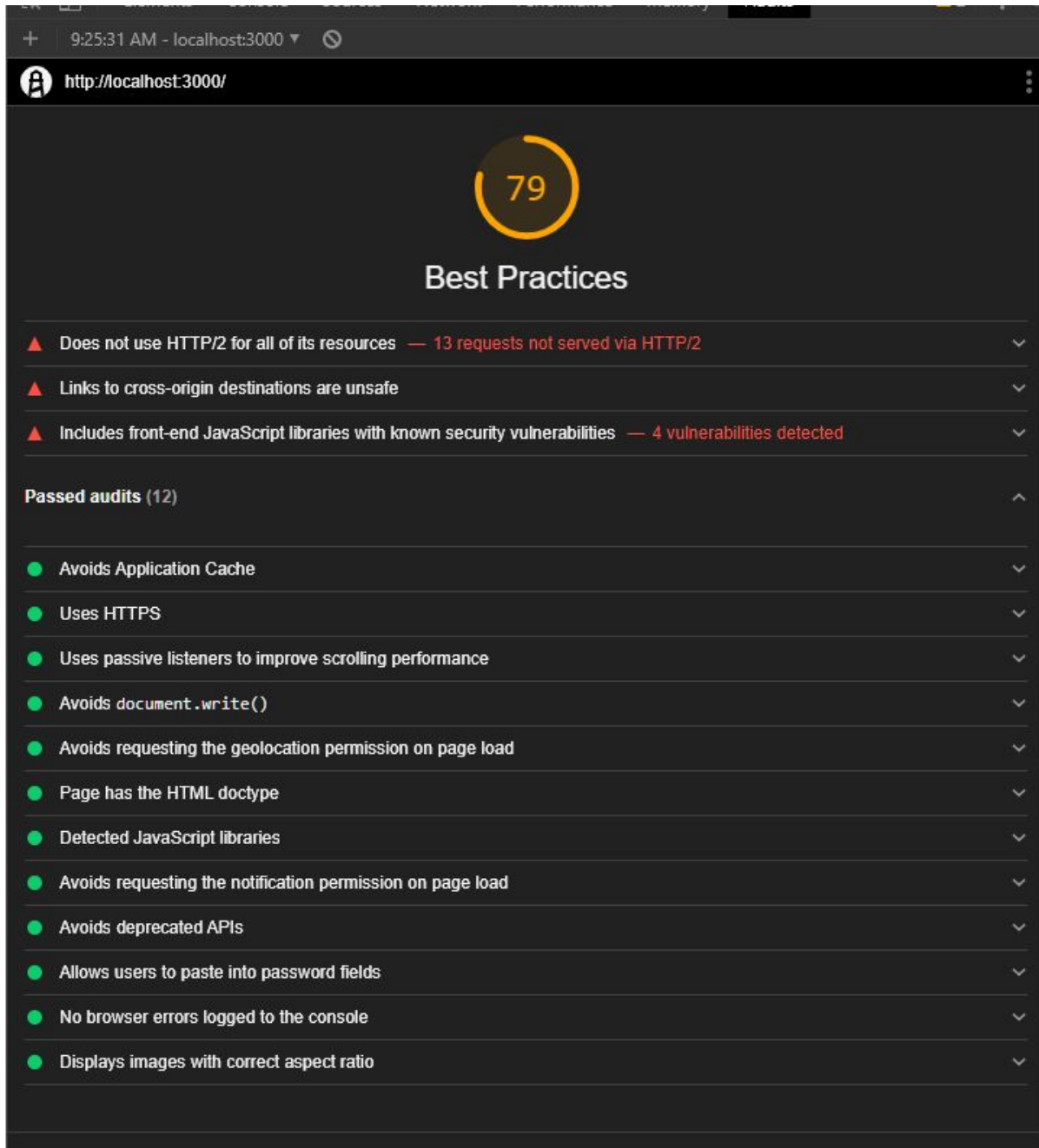


# VIRGIL'S TRAVELS

Runtime Settings	
URL	http://localhost:3000/
Fetch time	Dec 2, 2019, 9:17 AM PST
Device	Emulated Desktop
Network throttling	Provided by environment
CPU throttling	Provided by environment
User agent (host)	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/78.0.3904.97 Safari/537.36
User agent (network)	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_13_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/74.0.3694.0 Safari/537.36 Chrome-Lighthouse
CPU/Memory Power	498
Generated by Lighthouse 5.2.0   <a href="#">File an issue</a>	



## Efficiency Testing





# VIRGIL'S TRAVELS

9:27:31 AM - localhost:3000

http://localhost:3000/

98

## Accessibility

These checks highlight opportunities to [improve the accessibility of your web app](#). Only a subset of accessibility issues can be automatically detected so manual testing is also encouraged.

**Contrast** — These are opportunities to improve the legibility of your content.

▲ Background and foreground colors do not have a sufficient contrast ratio.

**Additional items to manually check (11)** — These items address areas which an automated testing tool cannot cover. Learn more in our guide on [conducting an accessibility review](#).

**Passed audits (19)**

**Not applicable (15)**

### Runtime Settings

URL	http://localhost:3000/
Fetch time	Dec 2, 2019, 9:27 AM PST
Device	Emulated Desktop
Network throttling	Provided by environment
CPU throttling	Provided by environment



# VIRGIL'S TRAVELS

9:28:26 AM - localhost:3000

http://localhost:3000/

89

SEO

These checks ensure that your page is optimized for search engine results ranking. There are additional factors Lighthouse does not check that may affect your search ranking. [Learn more.](#)

**Content Best Practices** — Format your HTML in a way that enables crawlers to better understand your app's content.

▲ Document does not have a meta description

**Additional items to manually check (1)** — Run these additional validators on your site to check additional SEO best practices.

**Passed audits (8)**

**Not applicable (4)**

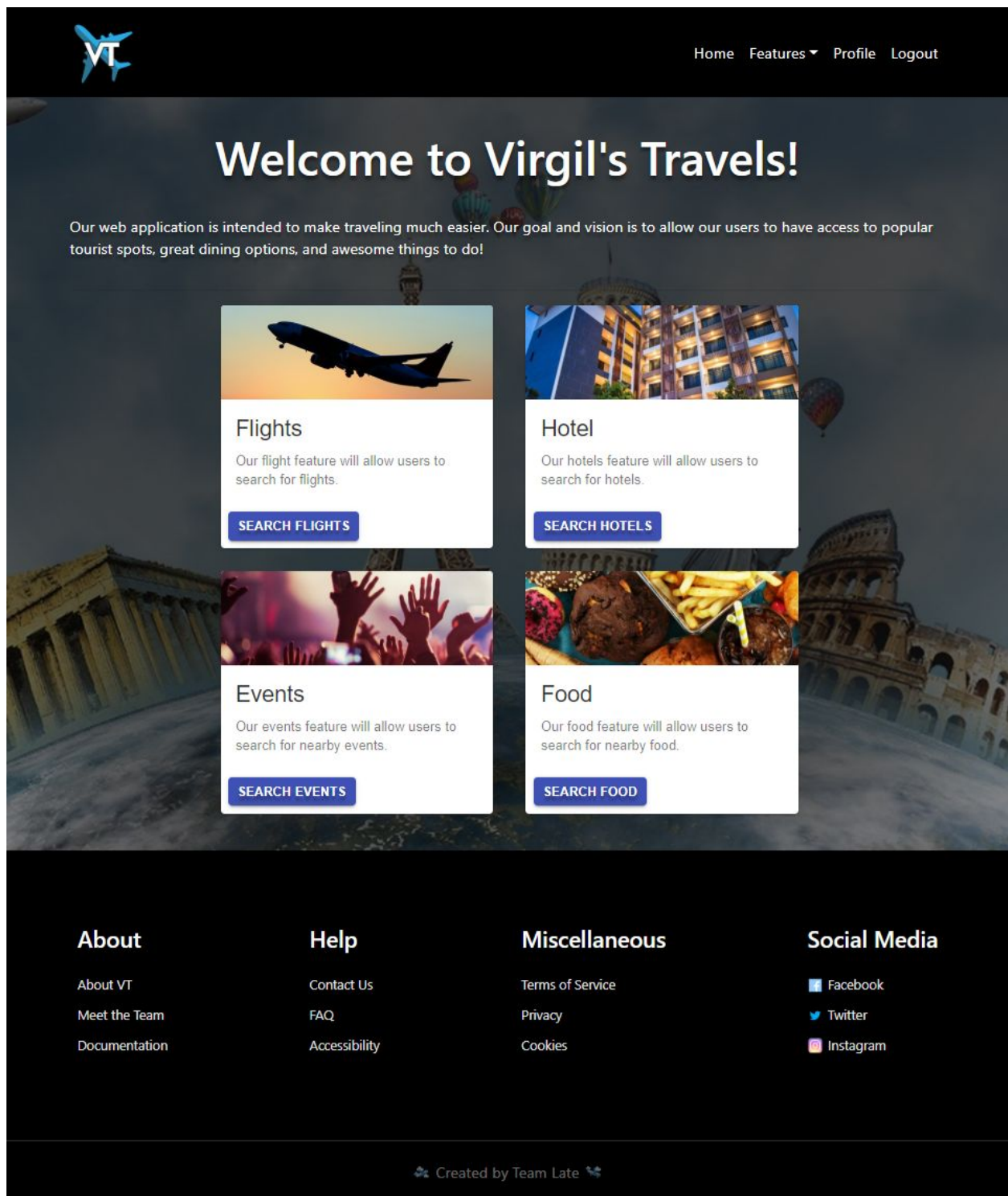
Runtime Settings

URL	http://localhost:3000/
Fetch time	Dec 2, 2019, 9:28 AM PST
Device	Emulated Desktop
Network throttling	Provided by environment
CPU throttling	Provided by environment



# VIRGIL'S TRAVELS

## Prototype/Products







## Flights Search

Adult

1 ▾

Children

0 ▾

Seniors

0 ▾

Infants

0 ▾

Departure date:

[SEARCH FLIGHTS](#) 

### About

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### Miscellaneous

[Terms of Service](#)[Privacy](#)[Cookies](#)

### Social Media

[!\[\]\(dcadc17c064c775919616fcc152162e9\_img.jpg\) Facebook](#)[!\[\]\(3f5477a6ad7457d6c5a54da9edc797f0\_img.jpg\) Twitter](#)[!\[\]\(5ca7d0bd23567a9aa1f800590644baea\_img.jpg\) Instagram](#)

## Event Search

Location  
Long Beach

SEARCH EVENTS

The South Bay Home & Garden Show  
309 E Ocean Blvd Long Beach, CA 90802

David Benoit - A Christmas Tribute to Charlie Brown  
6200 Alhambra St Long Beach, CA 90815

Capitol Steps - The Lyin' Kings  
6200 Alhambra St Long Beach, CA 90815

An Evening with Davis Gaines  
6200 Alhambra St Long Beach, CA 90815

An Evening with Davis Gaines  
6200 Alhambra St Long Beach, CA 90815

A.I.M by Kyle Abraham  
6200 Alhambra St Long Beach, CA 90815

One Night Of Queen  
6200 Alhambra St Long Beach, CA 90815

Live From Laurel Canyon - Songs and Stories of American Folk Rock  
6200 Alhambra St Long Beach, CA 90815

Ann Hampton Callaway - The Streisand Songbook  
6200 Alhambra St Long Beach, CA 90815

An Evening with Anne Lamott  
6200 Alhambra St Long Beach, CA 90815

DRUM TAO 2020  
6200 Alhambra St Long Beach, CA 90815

The Doo Wop Project  
6200 Alhambra St Long Beach, CA 90815

Mariachi Reyna de Los Angeles with Villalobos Brothers - The Soul of Mexico  
6200 Alhambra St Long Beach, CA 90815

Ballet Folklórico de Los Angeles with Jarabe Mexicano - Cruzando Fronteras  
6200 Alhambra St Long Beach, CA 90815

Miranda Sings -Who Wants My Kid?  
6200 Alhambra St Long Beach, CA 90815

The Urban Hive Market  
95 S Pine Ave Long Beach, CA 90802

BEAR CITY: Free Comedy & Free Pizza  
1923 E 7th St Long Beach, CA 90804

BEAR CITY: Free Comedy & Free Pizza  
1923 E 7th St Long Beach, CA 90804

You're Invited: LBX's First Ever Tree Lighting!  
4150 McGowan St Long Beach, CA 90808

Wine Walk & Shop  
192 E 22nd St, Los Angeles, CA 90031

## Food Search

Food  
(What type of food are you looking for?)

City  
90802

SEARCH FOOD

Zacatecas Restaurant  
2142 W 51st Street  
Long Beach, CA 90805  
4.5 stars

Saigon Dish  
9220 Hawthorne Blvd  
Lawndale, CA 90404  
4.5 stars

Shin-Sen-Gumi Hakata Ramen-Gardena  
2011 W Redondo Beach Blvd  
Gardena, CA 90247  
4.5 stars

Oh My Burger  
2142 W 51st Street  
Long Beach, CA 90805  
4.5 stars

King Mediterrano  
4384 Redondo Beach Blvd  
Torrance, CA 90504  
4.5 stars

Corner Burger  
4437 W 147th St  
Lawndale, CA 90302  
4.5 stars

India's Tandoori Halal Restaurant  
5285 Hawthorne Blvd  
Hawthorne, CA 90250  
4.5 stars

Hummus House  
5221 Hawthorne Blvd  
Hawthorne, CA 90250  
4 stars

Al-Noor  
16112 Inglewood Ave  
Lawndale, CA 90302  
4.5 stars

The Pan  
16821 S Western Ave  
Gardena, CA 90247  
4 stars

Chubby Rice  
5285 Hawthorne Ave  
Hawthorne, CA 90250  
4.5 stars

Pho Ever Restaurant  
2228 W Rosecrans Ave  
Gardena, CA 90248  
4 stars

Flights Craft Beer + Sports Grill  
5789 W 161st Street  
Long Beach, CA 90802  
4.5 stars

Chicken Maison  
2700 Hawthorne Blvd  
Redondo Beach, CA 90401  
4.5 stars

Bluesail Fish Grill  
2010 Arroyo Blvd  
Redondo Beach, CA 90401  
4.5 stars

Ensenada's Surf N Turf Grill  
4749 Arroyo Blvd  
Long Beach, CA 90802  
4.5 stars

North Italia  
548 S Sepulveda  
El Segundo, CA 90245  
4 stars

Al Watan Halal Restaurant  
13819 Inglewood Ave  
Hawthorne, CA 90250  
4 stars

Havana Mania  
3615 Inglewood Ave  
Redondo Beach, CA 90278  
4 stars

Veggie Grill  
725 Alhambra Way  
El Segundo, CA 90245  
4 stars





## Video Demo

## End of Sprint 4 Documentation

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### 1) Executive Summary

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#### Project Vision

- Our application, Virgil's Travels, aims to provide an interactive, all encompassing travel site that provides users with various options other sites may lack. We aim to make our application as social as possible by having users create profiles and see what other users have purchased, reviewed, and shared about their trips.
- Virgil's Travels is a Web Application. Ideally we would develop both a web application and a mobile application but for the scope of the class it is best to choose a web application for the following reasons.
  - Webapps work on smartphones and computers
  - No need to worry about developing the application twice. (Once for IOS devices and another time for Android OS devices)
- We plan on utilizing a great variety of technologies. Below we list the various technologies and their uses.
  - React will be used for front-end and it'll be used as the view of our application.
    - JavaScript will be used to utilized the React framework.
  - Flask will be utilized to create a restful API for all our back-end queries and requests.



# VIRGIL'S TRAVELS

- Python will serve as the language that is required to use the Flask framework.
- Cloud based MySQL database will be used to store our data.
- Docker will be used for creating a container that serves as a virtual machine for our application deployment to AWS.
- AWS will be our cloud service utilized for hosting our database on the cloud, deployment, domain routing, and computational services.
- The Scrum development process framework model will be adhered to in order to promote an agile work environment that optimizes work flow for small software development teams.

## Target Audience

- Our target audience encompasses any and all demographics in need of travel tickets, event tickets, and advice on planning for foreign locations/destinations. This may involve individuals in search of new locales to travel, families on vacation, or even business people in search of certain amenities.

## Risks/Opportunities

- Risks
  - Not delivering on the entire scope of the project by the project's due date
  - Not delivering a minimal viable product
  - Exposing user information that is meant to be private and therefore unexposed to outside viewing
- Opportunities
  - Expand knowledge related to software development in a professional environment using various technologies
  - Practice and perfect scrum development framework methods



- Create comprehensive and useful software and deploy on the market

## Conclusion

- We aim to design, document, and deploy a median to maximal viable product by the end of our four sprints. Given the scope of our project, the effort required to be put forth will be more than minimal. However, given that we believe in the usefulness and demand for our web application, we look forward to proving we are capable of meeting the requirements all the while learning about software design and architecture.

## 2) Software Mission

---

- The goal of this application is to provide a tool that hosts a wide variety of ticketing purchasing and review hosting/accessing services for those who are planning a trip to a destination.
- Our development team strives to produce a medium to maximum viable product (in the form of a web application) that will be painless to use, intuitive, useful, and feature rich.
- Our hope is to release a product that will be good enough to publish and obtain a sizeable following due to our product's quality.
- Virgil's Travels should work well with any computer and smartphone given that it will come in the form of a web application and will thusly support both platforms.



### 3) Pointage Methodology

- The items that are placed on a backlog are often aspects of the application that are being developed by the team as features of the app in question. These features are often pulled from user stories, which serve as descriptions of features from the point of view of a user/potential clients of said application.
- As can be seen in the table graphic below (Figure 3b), the ideal story size is anything that lasts between 1-12 hours to develop or create.
- In terms of pointage, we will stick to a 1-10 rating scale where each point value is assigned based on the estimated on a function of estimated time for completion and difficulty. The table below (Figure 3a) shows how each point on the 10 point scale relates to estimated duration of item completion and difficulty.

Point Value	Approx. Days / Hours	
1 pt.	1 Day ~ 6 hours or less	}
2 pts.	2 Days ~ 12 hours or less	
3 pts.	3 Days ~ 18 hours or less	}
5 pts.	4 Days ~ 30 hours or less	
8 pts.	5 Days (week) ~ 48 hours or less	}
13 pts.	10 Days (2 weeks) ~ 78 hours or less	
20 pts.	15 Days (3 weeks) ~ 120 hours or less	}
40 pts.	40 Days (6 weeks) ~ 240 hours or less	

Ideal Story Size

Break into smaller Story prior to Sprint (whiteboard)

Break into smaller Story during Refinement

Needs lots more Refinement

Figure 3a



# VIRGIL'S TRAVELS

Points	Estimated time for completion	Difficulty
1	1-2 hours	Easy
2	3-4 hours 1-2 hours	Easy Medium
3	5-6 hours 3-4 hours	Easy Medium
4	7-8 hours 5-6 hours 1-2 hours	Easy Medium Hard
5	9-10 hours 7-8 hours 3-4 hours	Easy Medium Hard
6	11-12 hours 9-10 hours 5-6 hours	Easy Medium Hard
7	13-14 hours 11-12 hours 7-8 hours	Easy Medium Hard
8	15+ hours 13-14 hours 9-10 hours	Easy Medium Hard
9	15+ hours 11-12 hours	Medium Hard
10	13+ hours	Hard



Figure 3b

## 4) Project Backlogs

### Sprint 1 Backlog

Sprint	Size (Pointage)	Backlog Item	Owner	Estimated Hours	Actual Hours
1	3	Learn Python	All	6	6
1	3	Learn HTML/CSS	All	3	4
1	3	Learn JavaScript	All	6	6
1	5	Learn React JS Framework	All	8	7
1	3	Learn Flask Python Framework	All	4	5
1	3	Learn about RESTful API's	All	4	4

### Sprint 2 Backlog

Sprint	Size (Pointage)	Backlog Item	Owner	Estimated Hours	Actual Hours
2	3	Frontend: Create UI	BR	4	4.5
2	2	Frontend: Ensure UI is mobile browser compatible	HM	4	3
2	4	Frontend: User Registration form	HM, CA	2	3
2	4	Frontend: User login form	BR	2	2
2	5	Frontend: User profile page	DI, BM	4	5
2	5	Frontend: User landing page	DI	4	4
2	5	Frontend: Guest landing page	HM	4	5
2	4	Backend: Set up cloud	CA	2	3.5



# VIRGIL'S TRAVELS

		database			
2	3	Backend: User login/logout	BM	3	4
2	6	Backend: User signup	BM	6	7.5
2	2	Backend: get user data	CA	2	1
2	3	Backend: Password encryption	DI	3	3
2	6	Backend: Docker container	BR	6	10

## Sprint 3 Backlog

Sprint	Size (Pointage)	Backlog Item	Owner	Estimated Hour	Actual Hours
3	3	Privacy Page	CA	3-4	4.25
3	3	Terms of Service Page	BR	3-4	3.5
3	3	Social Media	BM	3-4	3
3	3	Contact Us Page	HM	3-4	3
3	4	Frequently Asked Quesitons Page	DI	5-6	6
3	3	Accessibility Page	CA	3-4	3.5
3	3	Cookies Page	BR	3-4	3
3	4	Meet the Team Page	BM	5-6	5.5
3	3	Documentation Page	HM	3-4	3
3	3	About Virgil's Travels Page	DI	3-4	3.25
3	3	Search Bar	BR, CA	3-4	4.25
3	4	Flights Form	BR	5-6	5
3	6	Flights API	DI, BM	9-10	9.25
3	5	Flight Filtering	HM	7-8	6.5
3	6	Flight Purchasing	BR, DI	9-10	9

## Sprint 4 Backlog

Sprint	Size (Pointage)	Backlog Item	Owner	Estimated Hour	Actual Hours
4	4	Hotels Form	DI	5-6	6
4	6	Hotels API	HM, CA	9-10	10
4	5	Hotel Filtering	CA	7-8	7
4	4	Dining Form	HM	5-6	5.5
4	6	Dining API	BR	9-10	9
4	5	Dining Filtering	BM, DI	7-8	6.5
4	5	Events Form	CA	7-8	6
4	5	Events API	CA, BM	7-8	8.5
4	5	Events Filtering	BM	7-8	7.5
4	5	Car Rental Form	DI	7-8	6
4	5	Car Rental API	DI, BR, CA, HM,	7-8	16
4	5	Car Rental Filtering	BR	7-8	0
4	4	Review View	HM	5-6	6



## 5) Sprint 1

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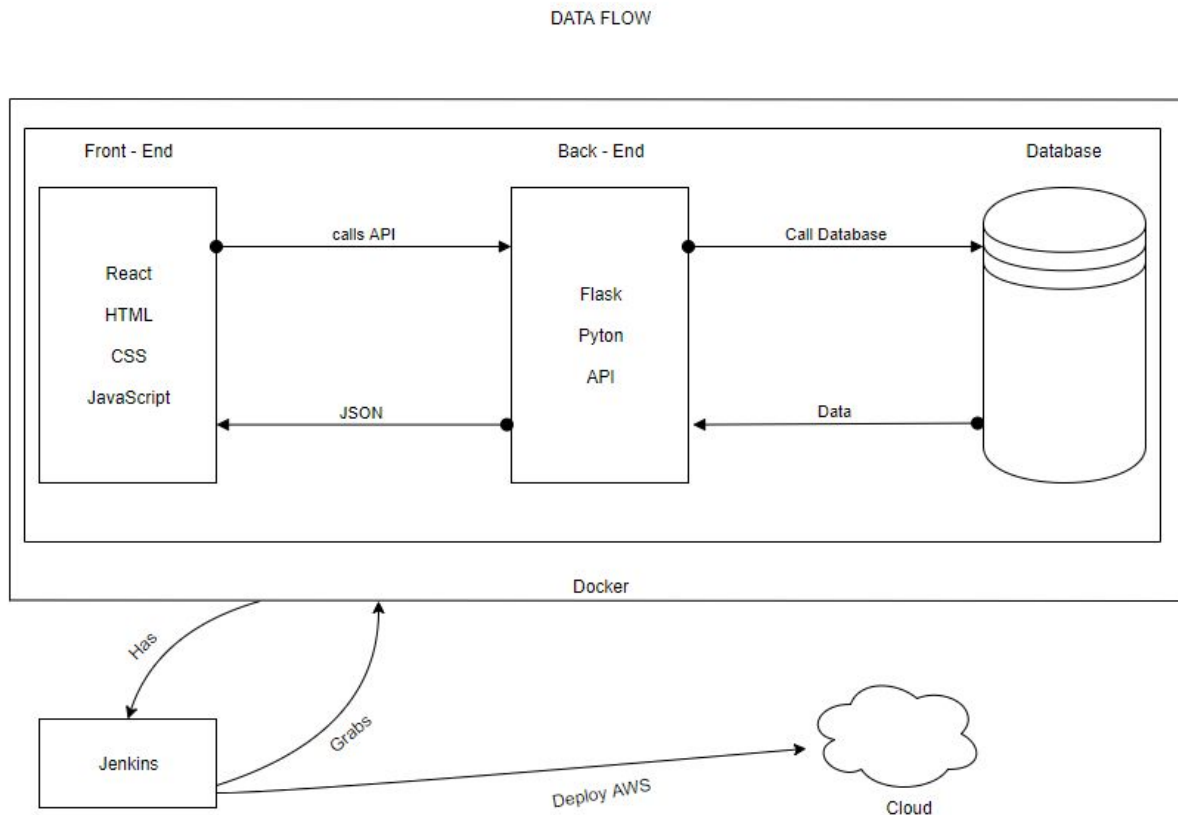
### 5a) Process: Scrum documentation

- In regards to our first sprint, we decided to use our time to familiarize every group member with the tools that we will be using throughout the project. The reason we chose to do our first sprint in this manner is because we are aware that some of us specialize better on backend rather than front end and vice versa. We wanted to keep the group onboard with everything that's going on within our project. The way we set this up was to assign points through each platform that the group was spending time to learn throughout the two weeks that the sprint lasted. As each member got more comfortable with the material, we would then move on to the next platform. The group decided that if one person wasn't onboard, it would lead to problems later on in the project that could have been prevented.





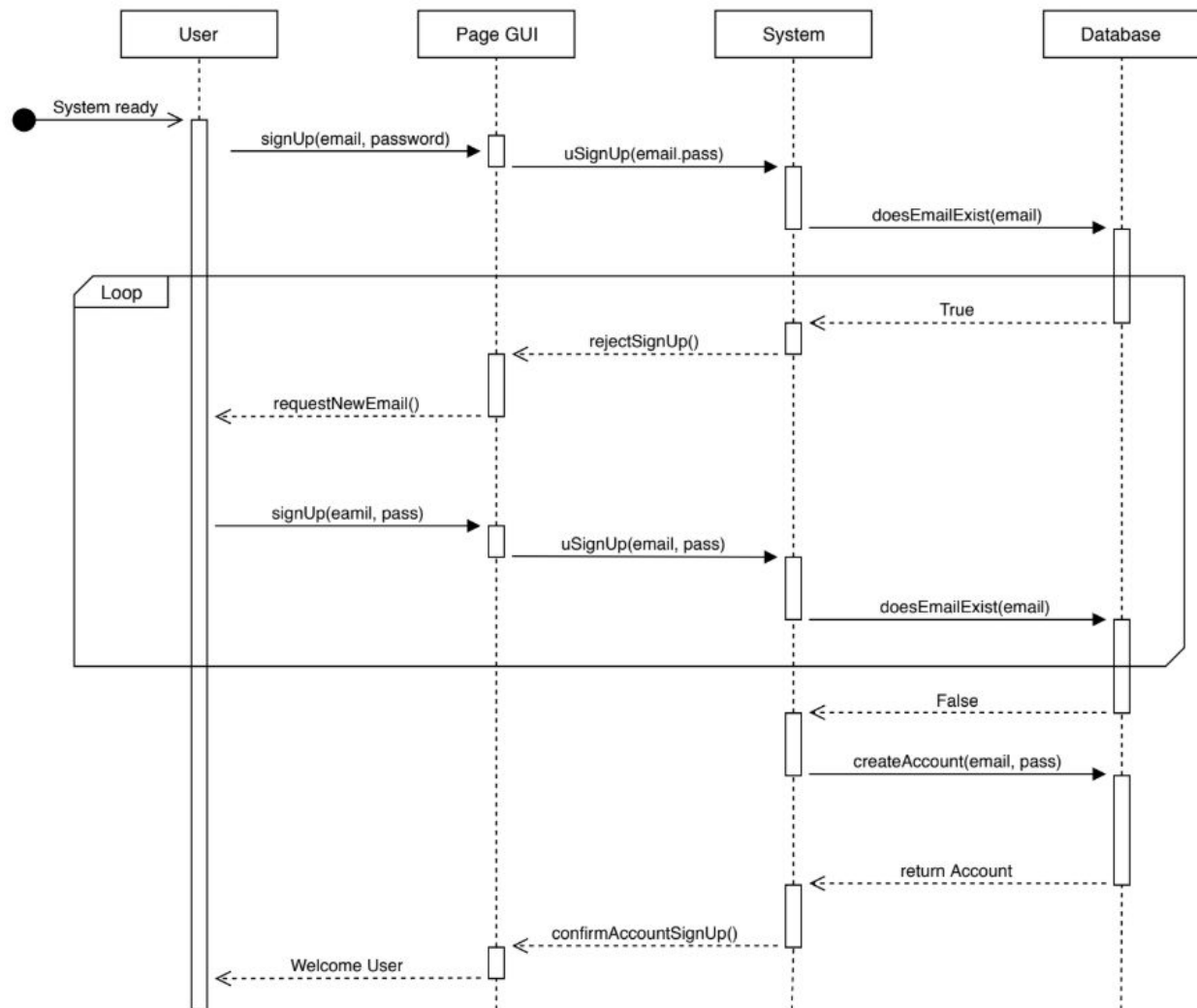
## 5b) Software architecture: Diagrams





# VIRGIL'S TRAVELS

## Development View Sequence Diagram





# VIRGIL'S TRAVELS

## 5c) Software Development: Work documents

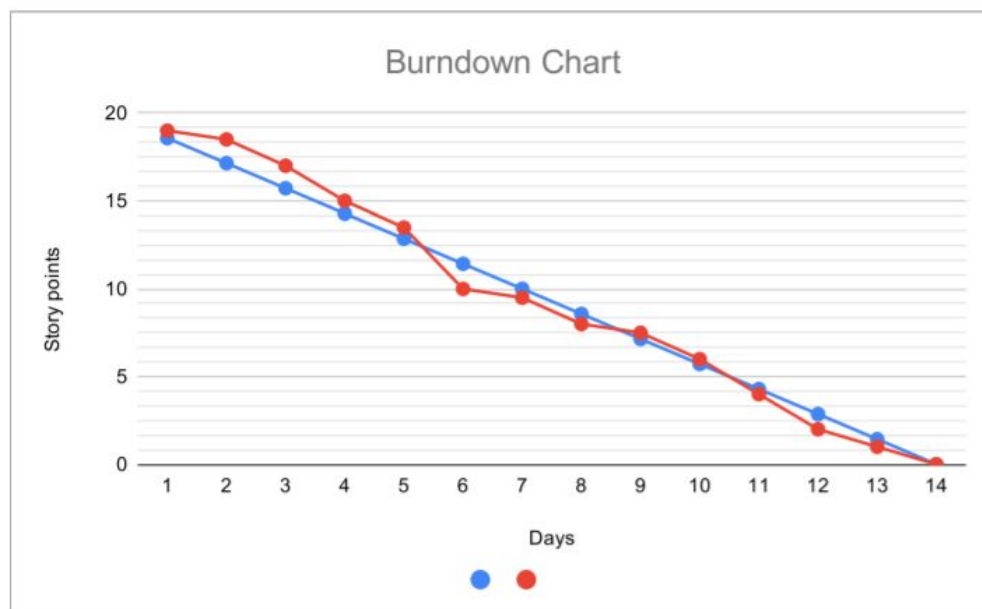
### Sprint Management Template

Number of days	14
starting story points	20

Ideal burn-rate	1.43	current day sp	20
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### Everyday Updates

day	ideal	actual burnt	velocity
1	18.57	19	1
2	17.14	18.5	0.5
3	15.72	17	1.5
4	14.29	15	2
5	12.86	13.5	1.5
6	11.43	10	3.5
7	10.00	9.5	0.5
8	8.58	8	1.5
9	7.15	7.5	0.5
10	5.72	6	1.5
11	4.29	4	2
12	2.86	2	2
13	1.44	1	1
14	0.00	0	1





## 5d) Sprint Review and Retrospective

### Review:

- We reviewed what work was done for sprint 1. The fundamental technologies were learned by the team via LinkedIn Learning and Youtube tutorials. We showed one another which videos were useful and which were lacking in their explanation for the technologies.
- During our two hour sprint review, we did not present any working prototype or features to the rest of the development team. Scrum methodology asserts that no work shall be demonstrated should it be incomplete. During this sprint, none of the core features were worked on in favor of the items listed in the sprint 1 backlog.
- During the collaboration phase we immediately came to a consensus that we should begin work on the features that a user would first see upon loading up our application. The items in our backlog for sprint 2 reflect these user considerations.

### Retrospective:

- What went well during the sprint?
  - The sprint allowed all the group members to be in accordance with the platforms being used for the entire application. All participants came to a consensus in the understanding of the basic functions for each of our tools that we plan to implement.
- What did not go well?
  - In terms of product development nothing was completed in sprint one. Sprint one was focused on the team getting up to



speed on web development and the different layers of software needed to create a modern and dynamic website

- What could be improved for better productivity next sprint?
  - Continued study of technologies to increase speed

## 6) Sprint 2

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### 6a) Process: Scrum Documentation

- Moving forward on to our second sprint, this is where we decided to assign roles to a specific person or a pair of people in order to successfully manage each goal set in the 3 week timeframe. We created a task list that would lead to a prototypical creation of our initial web page. The tasks were spread evenly, and were given to each group member based on how comfortable they were with the task. This is also where we took into account what we had learned through sprint one. Since mostly everyone was familiar with everything we would be using, each group member was given an interval of hours in which they could feasibly complete the task they were assigned. For the most part, group members spent the estimated time on their role and if they went over or under the time estimated we asked that they monitor how long it took in order to correctly fill out our burn down chart. In our chart, we can also see that we were stagnant in getting much progress done for the first few days of the sprint, but around day nine everyone did a good job in picking up their slack and completing what they were assigned to do. Then proceeding to the end of the sprint, the workload was managed well and our velocity wasn't excessive to prevent rushing the final touches of our first model.



# VIRGIL'S TRAVELS

## 6b) Software Development: Work Documents

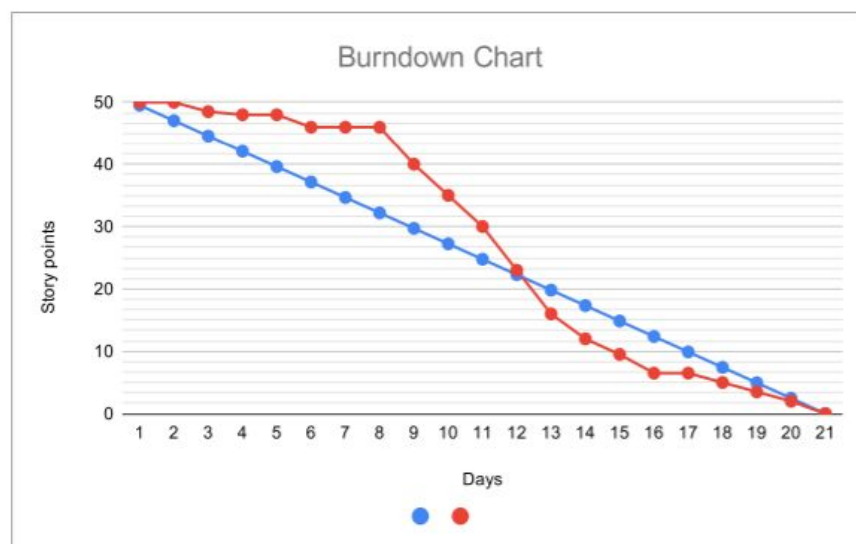
### Sprint Management Template

Number of days	21
starting story points	52

Ideal burn-rate	2.48	current day sp	20
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### Everyday Updates

day	ideal	actual burnt	velocity
1	49.52	50	1
2	47.05	50	0
3	44.57	48.5	1.5
4	42.10	48	0.5
5	39.62	48	0
6	37.14	46	2
7	34.67	46	0
8	32.19	46	0
9	29.71	40	6
10	27.24	35	5
11	24.76	30	5
12	22.29	23	7
13	19.81	16	7
14	17.33	12	4
15	14.86	9.5	2.5
16	12.38	6.5	3
17	9.90	6.5	0
18	7.43	5	1.5
19	4.95	3.5	1.5
20	2.48	2	1.5
21	0.00	0	2





## 6c) User Stories

### User Roles:

- Guest - Customer/User who has not logged in or even created an account
- Member - Customer/User who has created an account and is logged in
- Administrator - Staff member of the website who has high level privileges

## User Stories for Sprint 2

### Guest:

- As a guest I want to view flights and their corresponding tickets so that I can plan for the availability, costs, and other related factors that need to be accounted for.
- As a guest I want to view activities and events near destinations so that I can plan for the availability, costs, and other related factors that need to be accounted for.
- As a guest I want to view rental car prices for the visiting area/location so I can plan for the availability, costs, and other related factors that need to be accounted for.
- As a guest I want to view hotel options and prices so that I can plan for the availability, costs, and other related factors that need to be accounted for.
- As a guest I want to view reviews/blogs of locales and activities within visiting areas so that I can determine whether the service in question is desirable.
- As a guest I want to filter hotels, activities, entertainment options by a variety of factors including but not limited to: price, review ratings, distance from stay location, alphabetical, newness so that I can sort the results in a manner that is most helpful to what I want to accomplish.

### Member:

- As a member I want to sign in using email address or Profile ID as well as accompanying password, so that I can track all of my trips and search results.



# VIRGIL'S TRAVELS

- As a member I want to sign out and save settings upon sign out so that I can track all of my trips and search results.
- As a member I want to edit Profile info that allows for unique personalization, so that I can keep my profile up to date.
- As a member I want to access account information and edit non identifying information, so that I can keep my account up to date.
- As a member I want to view/purchase flights and their corresponding tickets so that I can plan for the availability, costs, and other related factors that need to be accounted for.
- As a member I want to view/purchase activities and events near flight destinations so that I can plan for the availability, costs, and other related factors that need to be accounted for.
- As a member I want to view/purchase rental car prices for the visiting area/location so that I can plan for the availability, costs, and other related factors that need to be accounted for.
- As a member I want to view/purchase hotel stays so that I can plan for the availability, costs, and other related factors.
- As a member I want to find and create traveler reviews of hotels, activities, events, restaurants, and other entertainment options in the destination location so that I can determine whether the service in question is desirable and to share my experiences with others who may want to know what the service was like.
- As a member I want to filter hotels, car rental companies, activities, entertainment options by a variety of factors including but not limited to: price, review ratings, distance from stay location, alphabetical, newness, trending so that I can sort the results in a manner that is most helpful to what I want to accomplish.
- As a member I want to Make and manage a list of places visited and then view sublists of each location's visited entertainment options so that I can track my activity on the website over time.

## Administrator:

- As an administrator I want to edit any site member profile so that I can correct problems for members.





- As an administrator I want to restrict access or outright banning accounts for problematic users so that I can make the website a more quality experience.
- As an Administrator I want to moderate reviews for appropriate conduct that are posted within our databases so that I can make the website a higher quality experience.
- As an Administrator I want to perform operations(create, replace, update, and delete) on the database via an administrator panel so that I can edit any listing, hotel, events, etc.

## 6d) Review and Retrospective

### Review:

- We reviewed what work was done for sprint 2. Having learned the fundamentals in sprint 1, we were able to complete all planned work. Conjoining all completed work yielded a functional prototype.
- We presented the product of our man hours in the form of the application and were pleased with the functionalities that we coded and designed for.
- Unlike sprint 1, much time was spent arguing over what to work on next and in the interest of time and in order to de-escalate rising tensions we agreed to table the matter for a later date. Preferably some time closer to sprint 3.

### Retrospective:

- What went well during the sprint?
  - During sprint 2, the group was able to progress more in the aspect of implementation of our first draft for the project. We had features that were functioning correctly, such as sign up, login, profile information, and came to an agreement on how our front end should be envisioned.



# VIRGIL'S TRAVELS

- What did not go well?
  - Back-end development and communication with the database was the most difficult part of this sprint and consumed most of our sprints troubleshooting and research time. In particular, encrypting user passwords with BCrypt, was troublesome due to our collective lack of experience with the software.
- What could be improved for better productivity next sprint?

Our documentation can be improved, as well as a more efficient use of some of the technologies.



# VIRGIL'S TRAVELS

## 7) Screenshots - Prototype Display

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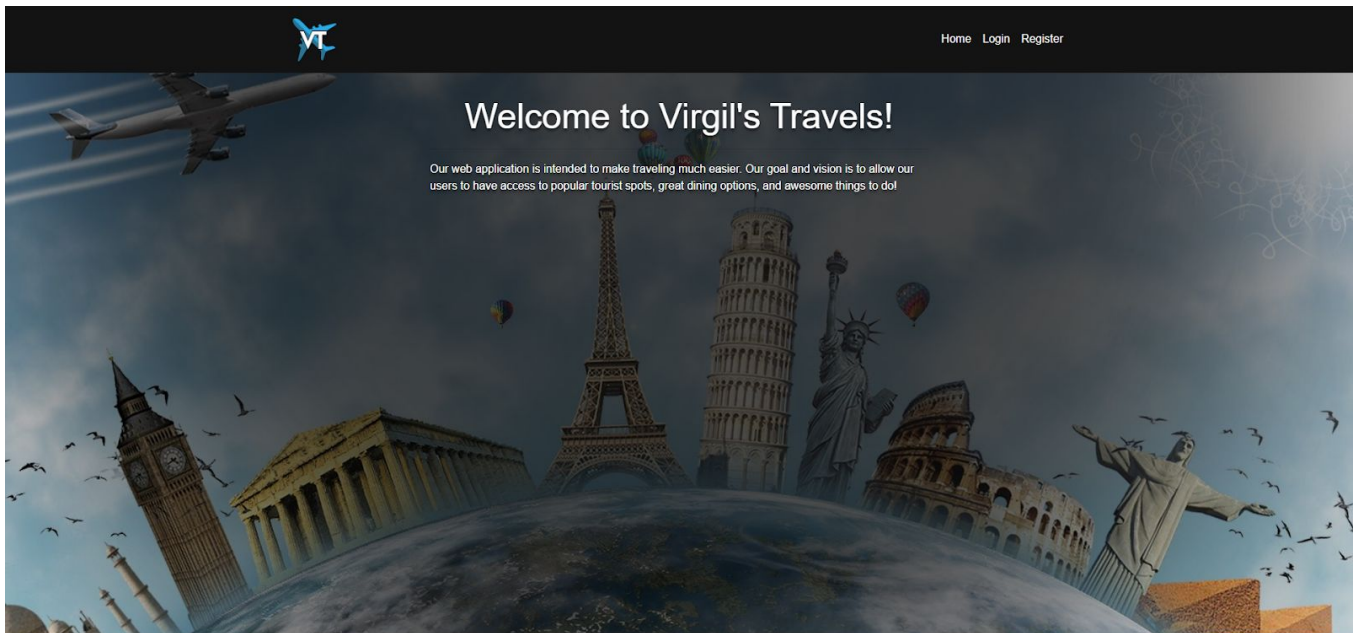
### Mobile Views





# VIRGIL'S TRAVELS

## Landing Page View



## Sign In Page View



Please sign in

Email address

Password

Sign in



## Register Page View



[Home](#) [Login](#) [Register](#)

### Register

First name

Last name

Email address

Password

Register!

## Profile Page View



[Home](#) [User](#) [Logout](#)

### PROFILE

Fist Name	Bryan
Last Name	Rojas
Email	BryanRojasCS@gmail.com

## 7) Part 2 - Video Demo

[https://www.youtube.com/watch?v=Qds\\_tL24U4g](https://www.youtube.com/watch?v=Qds_tL24U4g)



## 8) Reflections

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- For the first sprint we studied and at least gained an introduction to the technologies that we are using to implement our travel website. We studied Python, the Python Flask framework, and RESTful API for the backend of our project. For the front end of our project we studied HTML/CSS, JavaScript, and the React JavaScript framework. This was necessary since each team member had different strengths and weaknesses with the different technologies that would be required to complete this project. We made sure we at least had enough of an introduction to these technologies to get the project started. Despite the learning curve for some of these technologies, we felt we had enough of a base of knowledge to begin the project. We will continue learning and practising the different technologies as we continue with the project.
- For the second sprint we began creating the project. On the frontend we created the user interface making it mobile browser compatible. We also created the user registration form, user login form, user profile page, user landing page, and the guest user landing page. On the backend we set up the cloud database, user login, user logout, user signup, password encryption, and the Docker container. The Docker container took more time than expected to create, but turned out well.



## 9. Addendum

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### Prerequisites

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#### Specifications & Tools

- 64-bit environment (Trying to make it system agnostic)
- [Git](#)

#### Back-end

- [Python 3.7.x](#)
- [Pip](#)

#### Front-end

- [Node.js](#)

### Downloading Application

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1. Ensure git is installed on computer. You can verify by running the following command on your terminal.

```
git --version
```

2. Clone the GitHub repository.

```
git clone https://github.com/Project-Abeona/Virgils-Travels
```

### Verify Prerequisites

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1. Verify you have Python 3.7.x, open up terminal and run the following command.

```
python -V
```



2. Verify Node.js is installed.

```
npm -version
```

## Running Application

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Open two different terminals, one for the back-end and the other for the front-end. Make sure both applications are running simultaneously.

### Back-end

1. Change directory (cd) into the project folder.

```
cd Apollo
```

2. Change directory (cd) into the back-end folder.

```
cd back-end
```

3. Install Requirements

```
py -m pip install -r requirements.txt
```

4. Running the API server

```
python manage.py
```

Entering back-end workspace

```
PS C:\Users\Hector> cd virgils-travels
PS C:\Users\Hector\virgils-travels> cd back-end
PS C:\Users\Hector\virgils-travels\back-end> py -m pip install -r requirements.txt
```

Running back-end dependencies

```
PS C:\Users\Hector\virgils-travels\back-end> py manage.py
* Serving Flask app "manage" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Restarting with stat
* Debugger is active!
* Debugger PIN: 173-200-509
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```





# VIRGIL'S TRAVELS

## Front-end

1. Change directory (cd) into the project folder.

```
cd Virgils-Travels
```

2. Change directory (cd) into the back-end folder.

```
cd front-end
```

3. Install Node.js dependencies.

```
npm install
```

4. Running front-end client.

```
npm run start
```

Entering Front-end workspace and installing node dependencies

```
PS C:\Users\Hector> cd virgils-travels
PS C:\Users\Hector\virgils-travels> cd front-end
PS C:\Users\Hector\virgils-travels\front-end> npm install
```

Running back-end (npm run start)

```
Starting the development server...
```

## Contributing

1. Ensure the repository is cloned and you can change directory (cd) where it is located.

```
git clone https://github.com/Project-Abeona/Virgils-Travels
cd Virgils-Travels
```

1. Pull the latest version from GitHub

```
git pull
```

2. Create a branch for your changes. The name of the branch should be relevant to the work/changes being done.

```
git checkout -b "Bug-Fix"
```



3. Add changes to your branch via git add command. "." character can be replaced with a specific file if you don't want to add all changed files.

```
git add .
```

4. Commit changes with a relevant message.

```
git commit -m "Bug-Fix: Fixed issue with login."
```

5. Push changes to GitHub

```
git push origin HEAD
```

6. Create Pull Request
7. Send pull request to CECS 445 Discord Group Chat
8. Wait for code review and someone else to approve your changes.
9. Merge changes to master branch.

## Support From Developers

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### Contact Information

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