**CMPE 202 - Project Journal**

**Airline System**

**1) Team Members**

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**2) Tech Stack and Tools**

Stack – Python, Flask, MongoDB, React

Project Board – GitHub

Sprint Task Sheet – Google Sheets

Burn Down Charts – Google Sheets

Wireframes – Figma

Cloud Infrastructure – AWS

API Testing – Postman

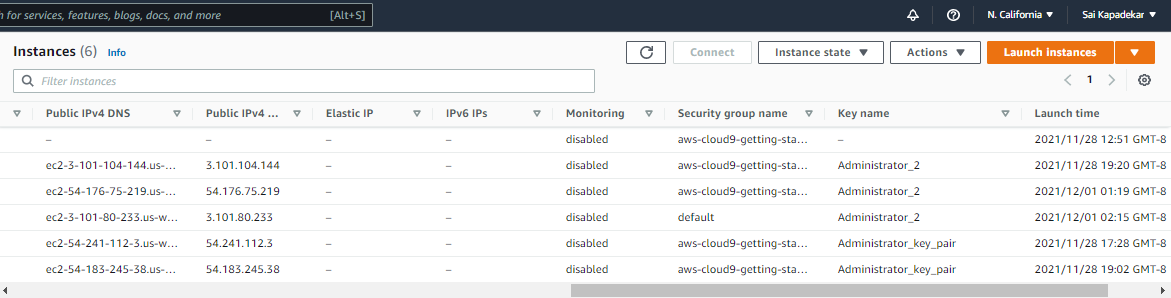
**3) Installation and Setup**

**Covered in readme.md files**

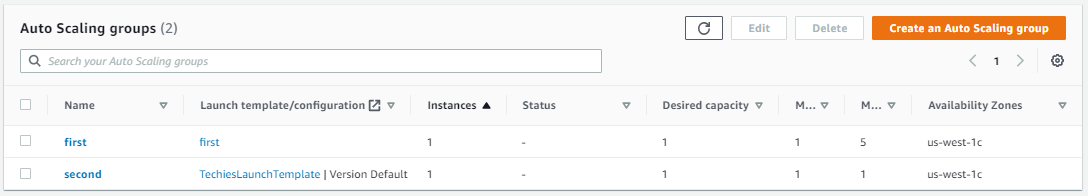
**4) Cloud Implementation**

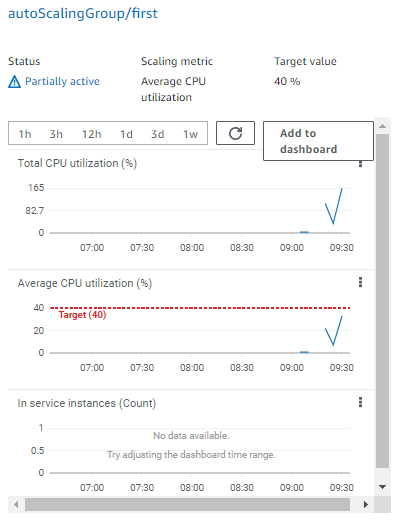
We have deployed our project on an Auto Scaled AWS EC2 instance. Auto scaling will maintain that there is no load on the server in times of traffic. It will automatically run additional instances to handle the traffic.

Launched Instances:



Auto Scaling:





**5) XP Values**

Extreme programming (XP) Core Values Implemented:

1. Communication:

* We established strong communication since the beginning of project. Our weekly sprints were planned on Mondays and Thursdays every week as the development was getting pace.
* In further stages of development, as everyone got hang of the project and was assigned individual tasks sprints were carried out on every Thursday.
* We communicated individual strengths and experience about particular technologies and used it to decide our technology stack.
* During one sprint meeting, two of team members debated on booking seats functionality, but was quickly resolved due to strong communication.
* At every stage of development, in every sprint, everyone was aware of each other’s task and progress.

1. Feedback

* Feedback played an important role in developing the functionality of our project.
* Everyone shared their ideas on how an API should work, what parameters it must consider and what the output should be.
* There were constant modifications in the functionality of the project depending upon the feedback of each team member after every sprint.
* We used Github Project Board to track our progress, resolve dependencies and to get idea of to-do tasks.
* Getting feedback from each other, motivated us to do better and develop a best working version.

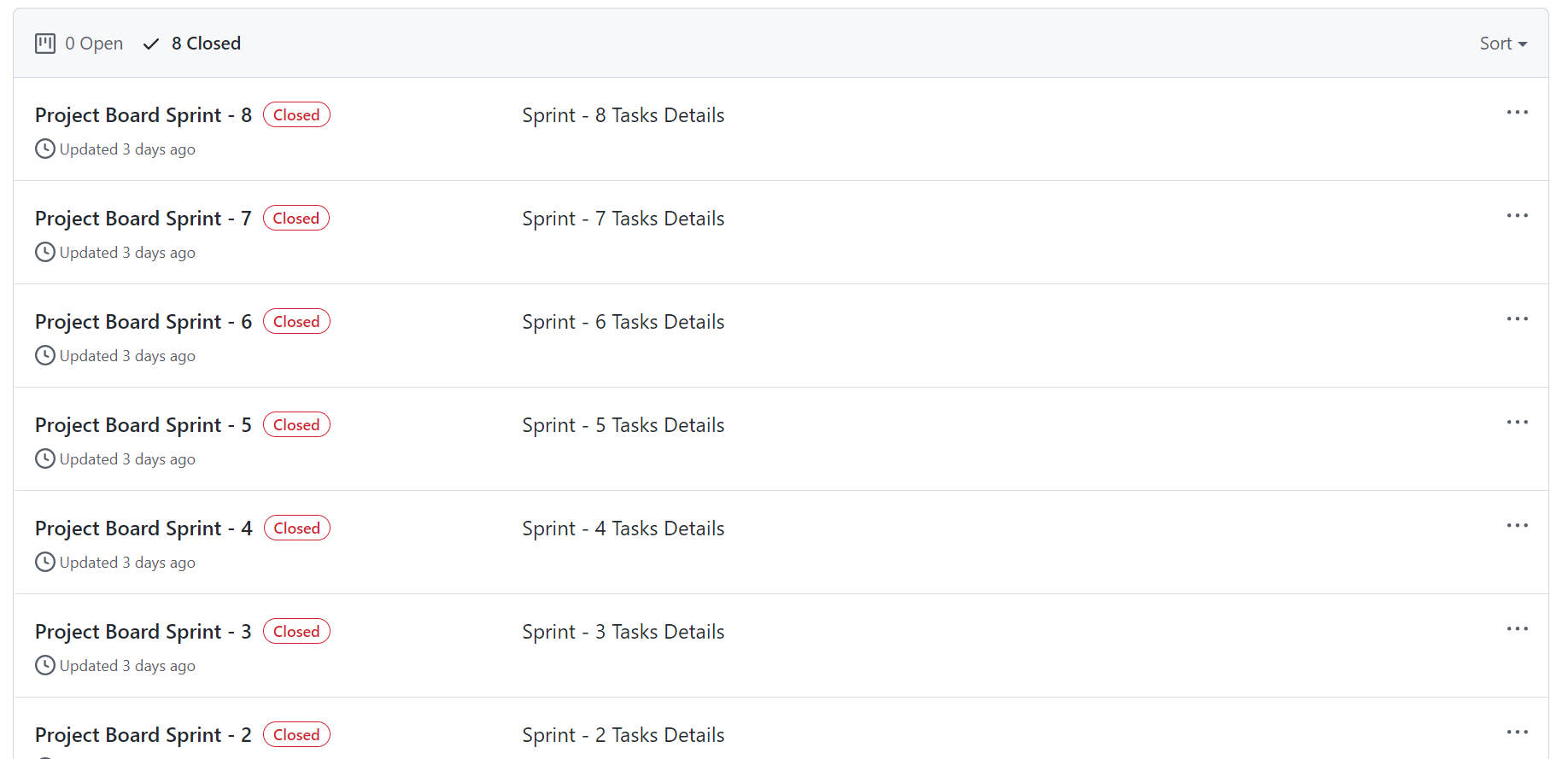
1. Simplicity

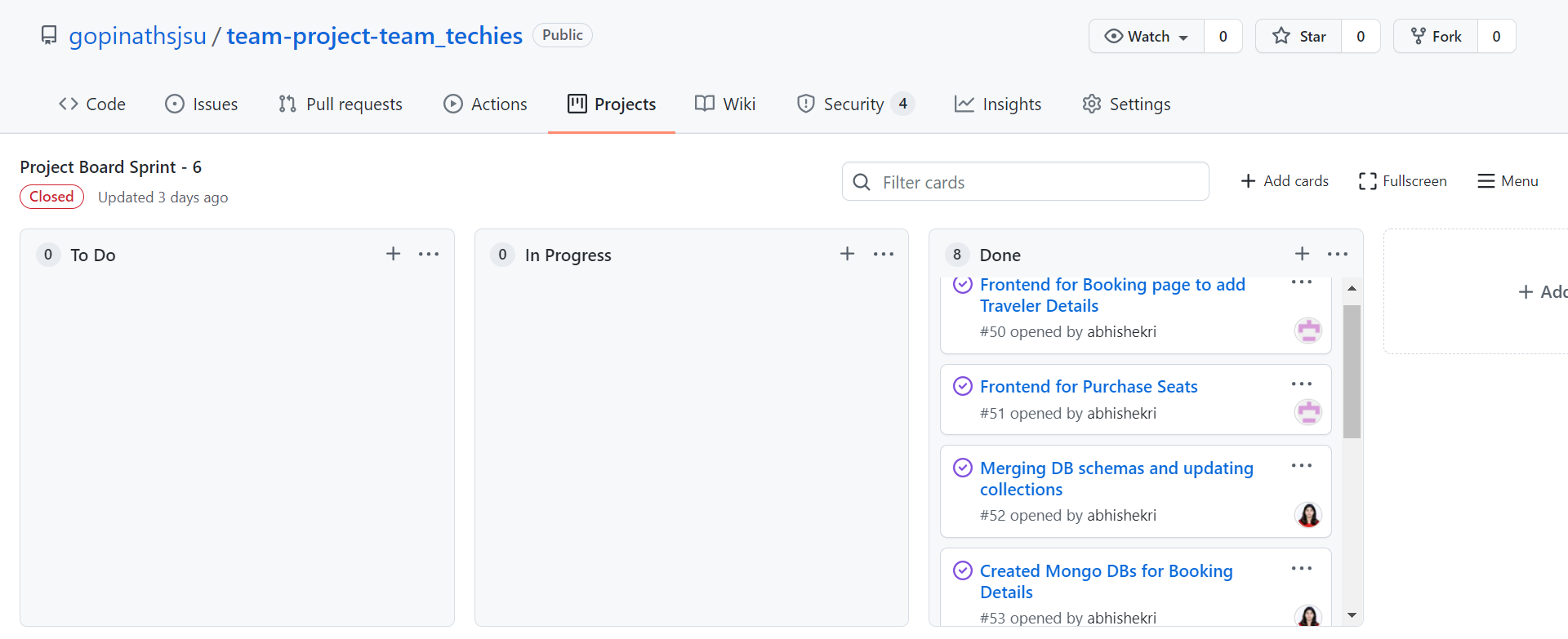
* We spent two sprints in exhaustive requirement gathering analysis and planning the development of the project.
* We identified key required components and developed a simple and clean system design.
* Simplistic design enabled us to have a clear vision about tasks in every sprint.

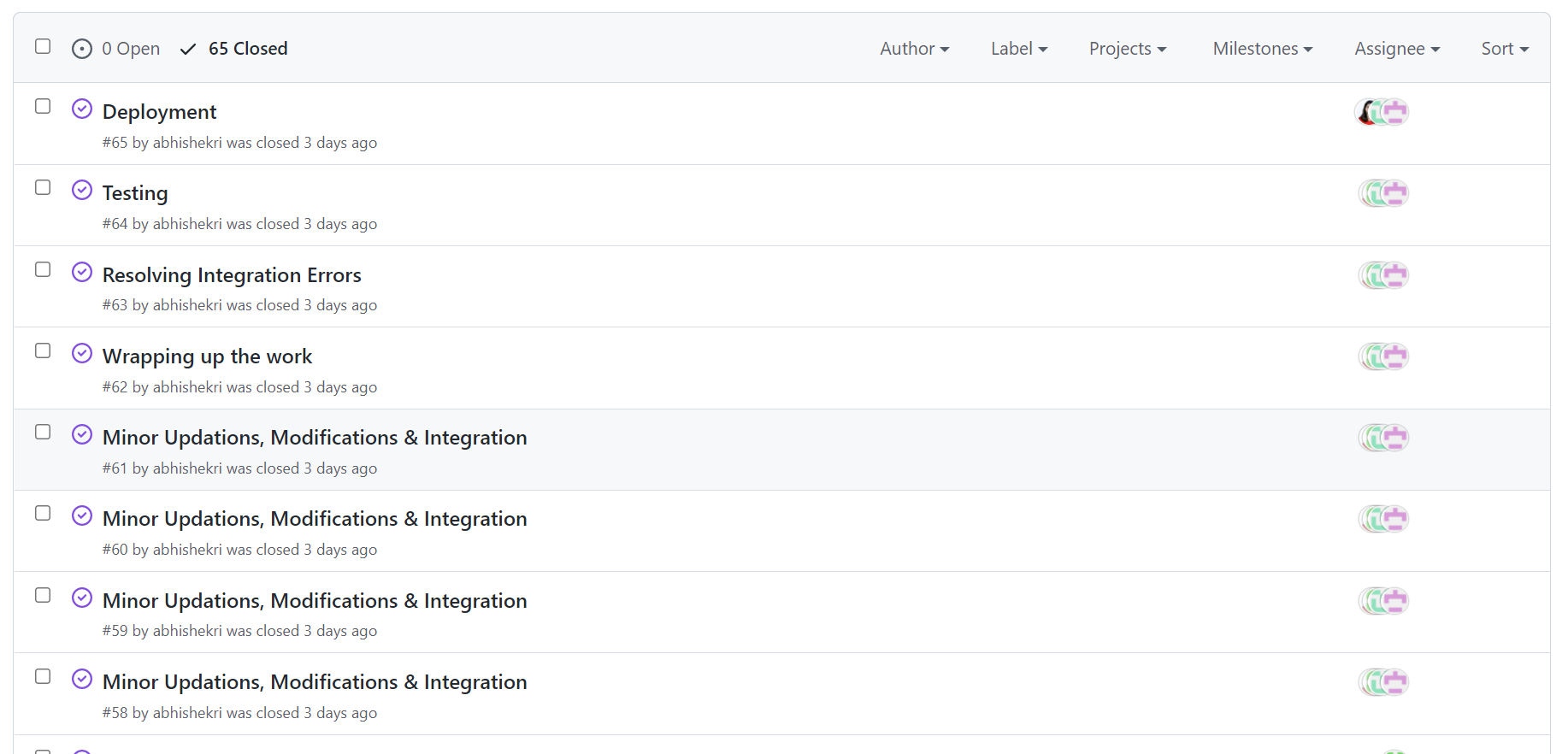
**6) Project Board**

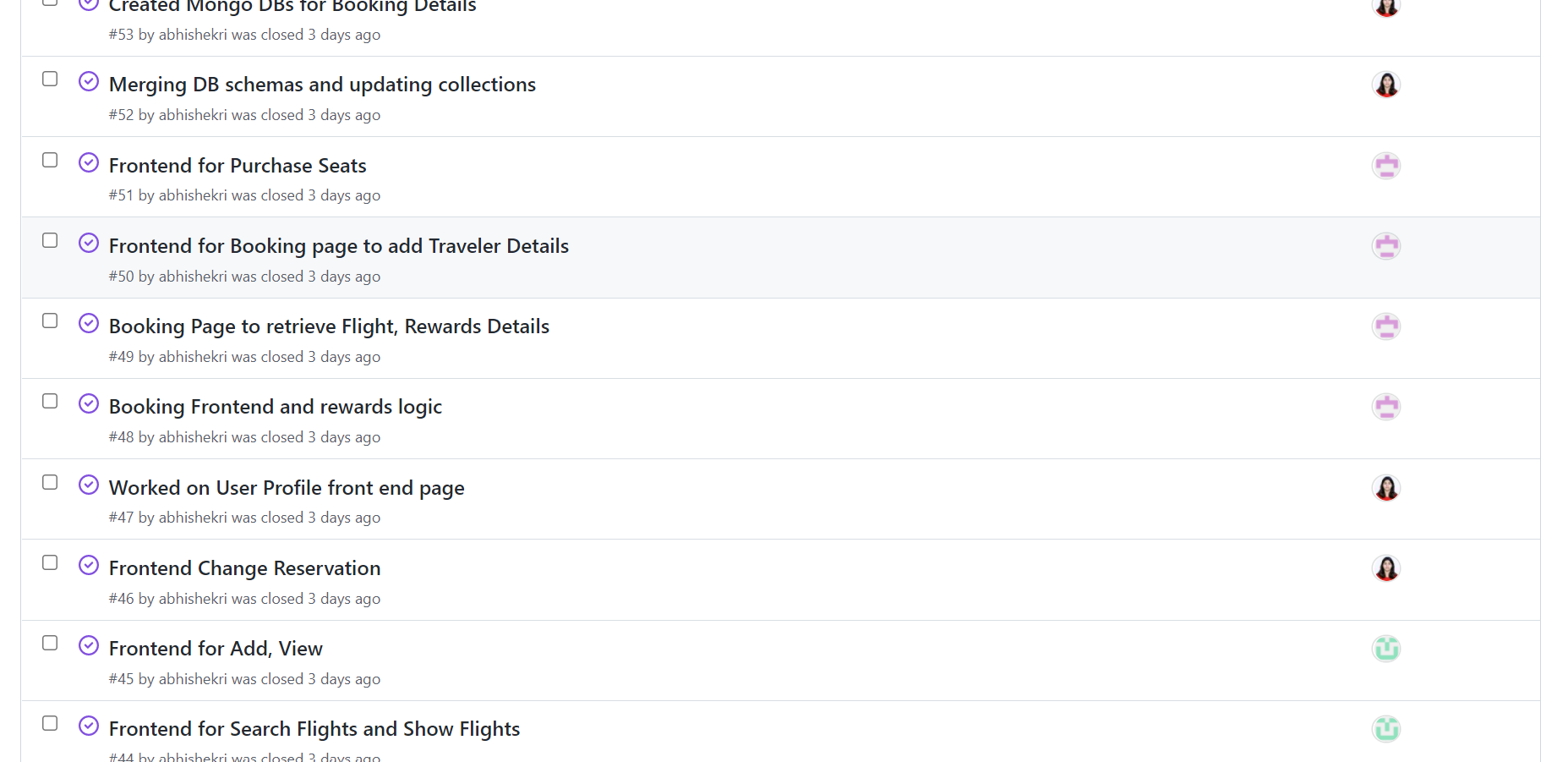
<https://github.com/gopinathsjsu/team-project-team_techies/projects?query=is%3Aclosed>

<https://github.com/gopinathsjsu/team-project-team_techies/issues?q=is%3Aissue+is%3Aclosed>







**4) Database Design**

Collection\_name: User

{

Id:<ObjectID>

Modified\_at: time

first\_name:"john"

last\_name:"doe"

email:[john2@gmail.com](mailto:john2@gmail.com)

password:"$pbkdf2-sha256$29000$HMOYs3YO4RyDkJLyvpeytg$bX8KUROQ49dR9vVkWTxoBcoIlP..."

user\_type:"customer"

mileage\_points:662

}

Collection\_name: Flight

{

Id:<ObjectID>

Modified\_at: time

flight\_num:"AA3457"

aircraft: <ObjectID>

departure\_airport: <ObjectID>

arrival\_airport: <ObjectID>

departure\_date:

arrival\_date:

departure\_time: "07:00"

arrival\_time: "08:00"

price: 220

remaining\_seats: 90

seats{

window:28

middle:27

aisle:29

}

Seat\_price{

Window : 5

Middle : 0

Aisle : 3

}

flight\_status: "canceled"

seat\_chart{

window:<Array>

0: ”1C”

Middle:<Array>

0: ”1B”

Aisle:<Array>

0: “1A”

}

}

Collection\_name: Booking

{

Id:<ObjectID>

Modified\_at: time

booking\_num :"#JUV7BTGRVDWY"

flight\_oid:

customer\_oid:

mileage\_points\_earned: 40

booking\_history: "canceled"

booked\_price: 220

traveller\_details{

name:"xyz"

}

flight\_status:"canceled"

payment{

reward\_points\_used: 10

cash: 210

}

seat\_num :"1B"

seat\_price : 0

seat\_type : "middle"

}

Collection\_name: Airport

{

Id:<ObjectID>

Modified\_at: time

Code: “SJC”

Name: “San Jose International Airport”

City: “San Jose”

}

Aircraft

{

Id:<ObjectID>

name: “Airbus 320”

total\_setas:90

seats{

window: 30

middle: 30

aisle: 30

}

Seat\_chart{

window:<Array>

0: ”1C”

Middle:<Array>

0: ”1B”

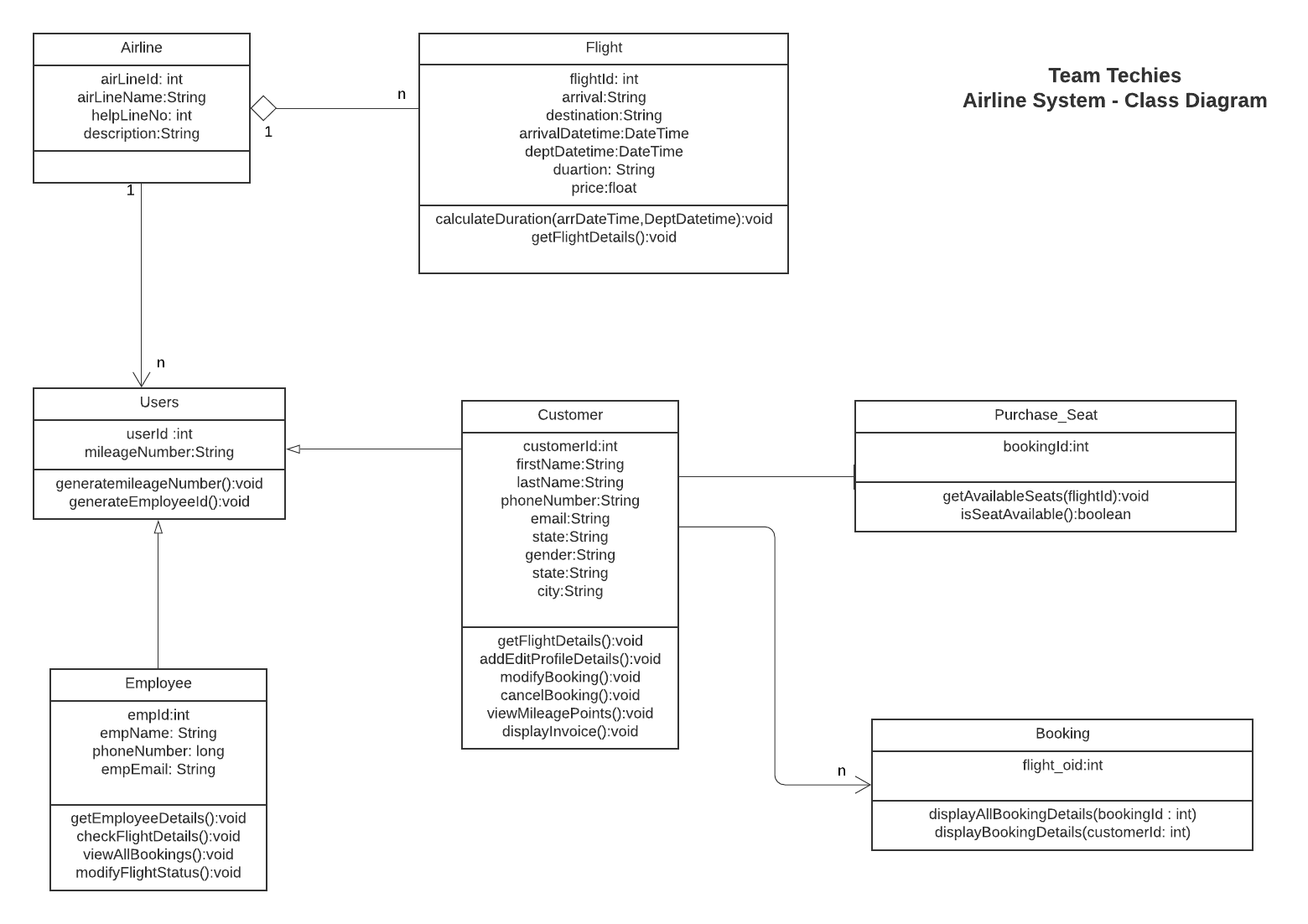
Aisle:<Array>

0: “1A”

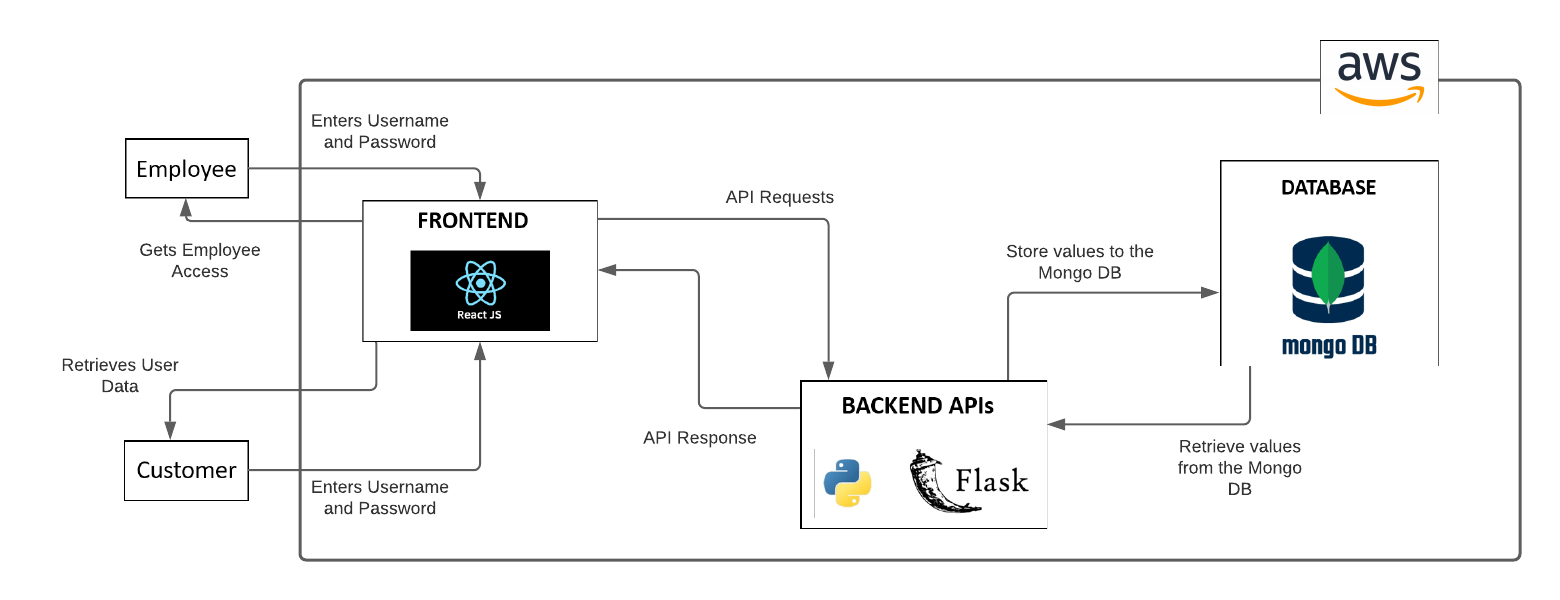
}

}

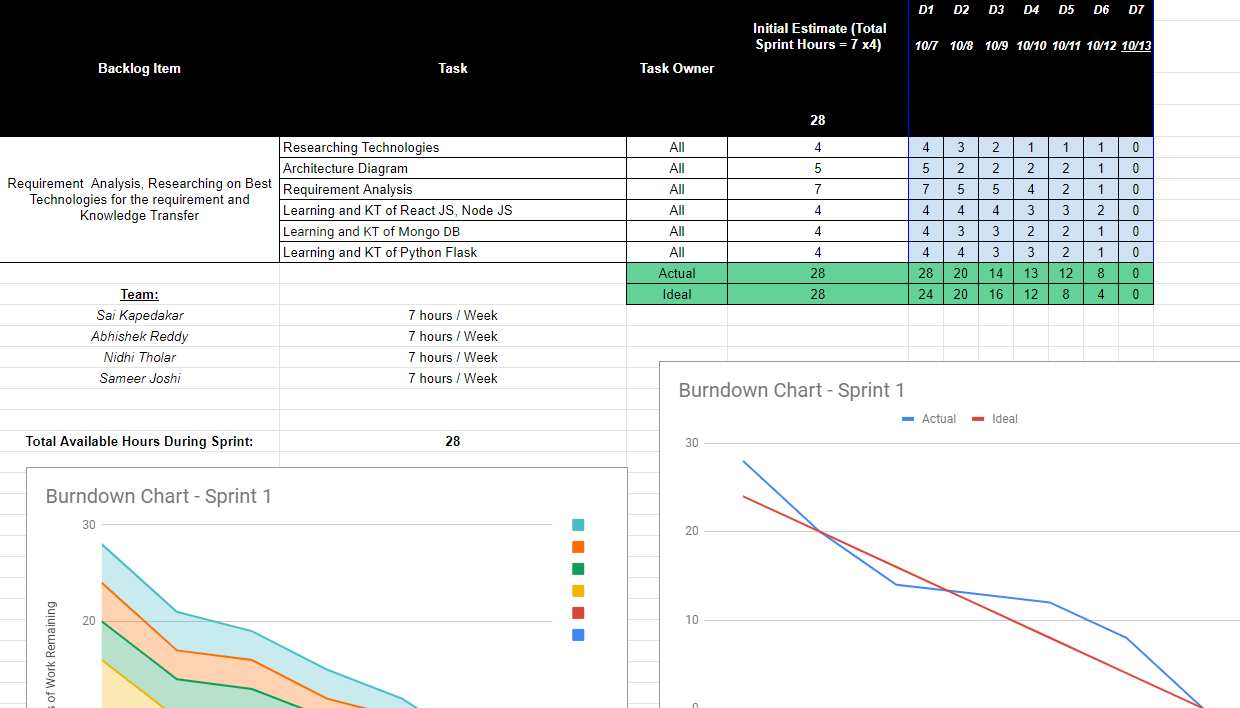
**5) Class Diagram**



**6) Architecture Diagram**

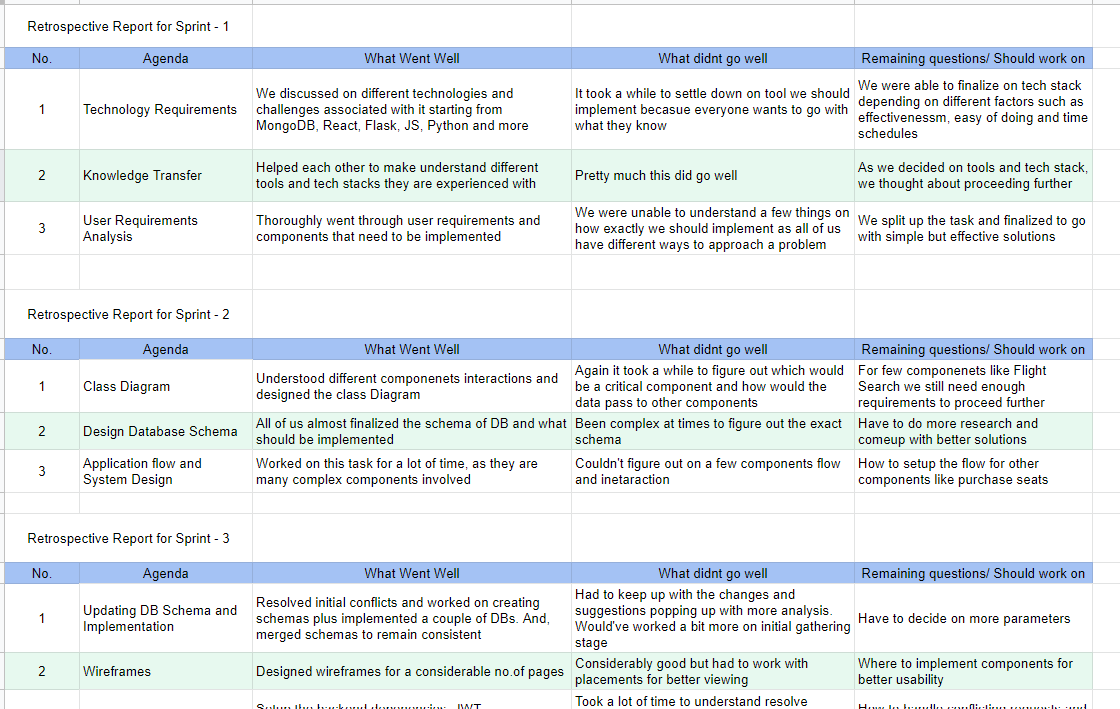


**6) Task Sheet and Burn Down Charts**

<https://docs.google.com/spreadsheets/d/1ygpydfTKiJSf9sMSvin8N8VKZnjJtatqK-yY7swSfHY/edit?usp=sharing>

**8) Retrospective Sprint Sheet**

<https://docs.google.com/spreadsheets/d/1qkVE57TqKiTPVYwF8EKbHxaOOvGZFEhWTGasEablBwI/edit?usp=sharing>



9) Individual Weekly Scrum

*Abhishek Reddy*

<https://docs.google.com/spreadsheets/d/1_aHNmTuNIYFgEyqz5o2FzVLN7aCttFjf59oA6MB923c/edit?usp=sharing>

