EE/CprE/SE 491 WEEKLY REPORT sddec20-20

March 2nd - March 15th

Group number: 20

Project title: A Parking Sharing System

Client &/ Advisor: Ahmed Kamal

Team Members/Role:

Jeremy Galang (Project Manager)

Ethan McGill (Webmaster)

Gabrielle Johnston

Jorden Lee

Lorenzo Zenitsky

Jason Neville (Communications)

- **Weekly Summary**
  - Found a new verification API that might be able to verify identity and homeownership
  - Created an account on Verify.ng to see what features were included and see if pricing was available
  - Looked further into Vouched and IDAnalyzer verification API's for more information
  - Did research on Docker containers vs VMs, each has its own capabilities but have tradeoffs.
- **Past Week Accomplishments**
  - Further discussed using a container or VMWare to contain the application during development.
  - Discussed ideas of possible screens that will be in the application.
  - Researched the problem of host verification, found possible APIs that can verify the driver's license information.
  - Found out that most if not all counties in Iowa at least have public records of property tax payments that can be used to check the validity of the host's ownership.
- **Pending Issues**

- ○ Verified.ng API doesn't provide pricing options, we may need to contact them.
  - ○ Figuring out how to migrate everything so that we can work remotely and coordinate everything.
- **Individual Contributions**

NAME	Individual Contributions *(Quick List of contributions. This should be short.)*	Hours this week	Hours cumulative
Jeremy	Looked into VMWare recommendation. Researched differences between VMWare and Docker containers, seems that they both do what was originally intended. Looked at the student options available for VMWare, may need to do more research on specific available ones. VMWare versions: Fusion - mac Workstation - windows Vsphere - the actual hypervisor. Containers have faster startup times and use resources more efficiently. VMs can have bigger sizes and have a longer startup. May need to figure out more specific requirements for our application. Looked a little bit into React vs Ionic.	5	11.5
Lorenzo	Researched licensing information on various frontend UI frameworks to see if they can be incorporated and also mocked out some UI sketches using Adobe XD. Researched the React Native mobile application framework as another option next to Ionic for the development of our app. Also, I looked into two-factor authentication methods and frameworks for React Native.	6	11
Jason	Worked on a conceptual sketch of the Map listing page and further looked into Backend technologies. Researched about good video meeting clients for extended time away from	5	10

	campus. Identified Google Hangouts, Skype, and WebEx for good potential solutions. Also looked at different backend technologies that will be good for server development.		
Ethan	I looked into the verification issue. Found APIs that can verify driver license information that may be useful. Created concepts of the main menu screen for our application. Found another API called Verified.ng that might be able to validate the hosts' identification, as well as homeownership without having to web-scrape county tax records. Appears that it can be used for free while the project is in the development stage.	5	13
Gabrielle	Experimented with Ionic templates in creating base applications. I think it could be a valuable tool to develop with. Also started on React Native. It seems to be more efficient overall.	5	10.5
Jorden	Downloaded and practiced using VMWare with Iowa State Linux machines. I also started looking at the parking apps downloaded on my phone for ideas on how to implement some features. Looked into a way to validate the vehicle and driver. Best way seemed to be to use the vehicle's license plate number because it is unique.	5	10.5

- **Plans for the upcoming week**
  - Contact the Verified.ng API writers for more information on pricing
  - Further refine the tasks for development
  - Setup a development environment on gitlab, and start inputting task in the gitlab project tracking
  - Begin downloading and experimenting with the technologies we are looking to use.

- **Summary of weekly advisor meeting**
  - Use zoom for the client meeting
    - https://iastate.zoom.us/
    - Can get from Iowa State
    - The client will send us more information and start meetings
  - Should include meeting times in the total time spent on the project
  - Team meeting on discord
  - Want to put tasks on GitLab and skeleton project
  - Start learning React