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|  | Martial Arts Gym Information Tracking System (MAGITS) |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Technology Requirements | |
| **Version 1.0** | |
| 25 November, 2019 | |

**Technology Requirements**

It is assumed in this learning plan that the team has successfully passed FullStack Course with MEAN Stack and will therefore further build on that knowledge on this learning plan for Capstone II.

**Learning Plan**

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| --- | --- | --- | --- |
| **Start Date** | **End Date** | **Resource** | **Team Members** |
| **Dec. 17, 2019** | **Dec.20,2019** | **Web Qr Scanner Implementation** | **Yang, Maria Lilian**  **Naguit, Sir Angel** |
| **Dec. 17, 2019** | **Dec.20,2019** | **AngularJS**  **User Login Authentication** | **Jacildo, Aldrin**  **Victa, Francis** |
| **Dec. 17, 2019** | **Dec.20,2019** | **Sending Mail through Mean Stack** | **Jacildo, Aldrin**  **Naguit, Sir Angel** |
| **Dec. 23, 2019** | **Dec. 27,2019** | **Angular Material Forms with MongoDB and AngularJS** | **Yang, Maria Lilian**  **Naguit, Sir Angel**  **Victa, Francis** |

**Technologies**

|  |  |
| --- | --- |
| **Resource** | **Reasoning** |
| **Database:** mongoDB with Mongoose | To implement a data store that provides high performance, high availability, and automatic scaling. |
| **Programming Language:**  TypeScript, Javascript | Typescript is the primary language where Angular is built from and therefore using it will greatly help us in understanding and using the Angular framework.  Javascript is used in the backend. Although we are using Express as a back-end framework, it is also good to have understanding with javascript just in case it is needed. |
| **Runtime Environment:** Node | The Node environment has the capability to import modules such as a QR code scanning module that can be used in the project. It eases the developer’s workload and frees up their time to execute more tasks at hand to increase productivity. |
| **Frontend Framework:**  AngularJS | Angular helps focus on code reuse by utilizing APIs that are already available rather than having to recreate a code. This will greatly help us build a web application faster given a short span of time. |
| **Backend Framework:** Express | Express is a Node.js framework that will be utilized within the backend component of the project. It promotes simplicity, scalability and flexibility. It will also be used in tandem with MongoDB. |
| **Web Host:** Heroku | A cloud platform service that will enable deployment of web projects to the internet. The platform has been encountered and used in projects by the developers a couple of times thus leading to the decision of using it as a web host. |
| **Hardware:** MobilePhone, Laptop, Mobile Phone and Laptop Camera, PC | Essential hardware to be used during the development of the project. |
| **Coding Environment:** Visual Studio Code | A free code editor that is widely used by other developers. It has great support for Node.js, HTML, CSS, SCSS and Git. |
| **Repository:**  Github | Makes collaboration on a project easier by keeping track of all the changes that have been pushed to the repository. |