

# Technology Requirements

Hobby Store Online Platform will be developed with MongoDB, Express.js, Angular and Node.js also known as MEAN Stack. Our group decided to use these technologies to build fast, robust and maintainable web application to meet our goals and goals of our client. MEAN Stack is amazing to us, it enables our team to write entire project in Javascript and that is a benefit in our opinion. It makes our communication better because everyone uses same programming language and that makes all of us to be on the same page syntax wise. We have been introduced to MEAN in fifth semester and we fell in love with it since then. One of major reasons we pick this technology is that, next semester we will be having MEAN stack course part two that will allow us to learn more and add more to our Capstone project because, we will continue to learn how to develop better solutions with MEAN stack and that makes us all excited, we can't wait to start Capstone part two to show our skills and what we have learned since we started this fantastic program at George Brown College. We going to explain this four technologies that produce MEAN Stack solutions.

	Technology Name	Programming Language	Reasons
Database	MongoDB	JavaScript /JSON (Javascript Object Notation)	MongoDB is number one NoSQL Database in the world, it does not need and predefined database schemas or rules, which leads to fast interactions with the Database. MongoDB supports JSON format data transfer, that makes data transfer easy and economical. Using MongoDB allows us to write entire Web Application with JavaScript language, that is huge benefit of using MEAN Stack.
Front-End	Angular.js	Html, Css,TypeScript, Javascript	Angular is a open-source javascript framework for developing dynamic web application, it is supported by Google and it became very popular since its release in 2010. It is used to produce front-end of web applications that can be dynamic and responsive. Angular uses HTML as a template for its pages and CSS for its styles and that is great because, everyone in our group is familiare with this two and that makes us feel like we are not exposed to something completely new, more like we are adding on top of our knowledge as a developers.
Back-End	Express.js	JavaScript	Express is a framework for Node.js and they can be used together easily when starting the web application. It has built in support for Routing and various Http handlers, session management and middleware. Rather than having to build the routing ourselves with just Nodejs

Back-End	Node.js	JavaScript	NodeJS fits well with Object Databases such as MongoDB. When used with MongoDB it takes away the hassle of doing multiple conversion into JSON. NodeJS makes use of Chrome's V8 Engine, providing optimal speeds for web applications. It is also useful for non-blocking, event-driven code which provides a real-time application. Since our app will not be requiring high cpu computations we can use NodeJS' scalability and optimum performance to our advantage.
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