**Team ASAP**

**(ZAPP)**

**Team Members-**

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**Project**

**EXECUTIVE SUMMARY:**

1. ZAPP is an ecommerce website built using the technologiesreact, mongoDB, express.js, node.js.
2. Our Website provides a streamlined and clutter-free user interface.
3. ZAPP provides a category section where different categories like electronics, sports, fashion etc are there.
4. Customers can find their required product on our website and can get it in a convenient and safe manner.
5. The website has been made with the intention of not showing any kind of unnecessary advertisement for a smooth user experience.
6. The backend is quite flexible and can easily integrate with third party APIs.
7. The frontend is made to be responsive and user-friendly.
8. ZAPP has a unique functionality of tracking prices of the products which the user wants to buy and setting the price which he/she can afford and as soon as the price drops, he/she will get notified.

**Literature Review:**

Recent years have seen a rise in the popularity of e-commerce websites as many people nowadays resort to online shopping as a quick and easy way to buy items at your doorstep as many trusted big platforms are in the market right now. The quality and variety of products supplied, the website's usability and the safety of online transactions are just a few of the crucial elements that determine whether an e-commerce website will be successful.

Study has shown that a positive user experience is important for the success of an ecommerce website. User Interfaces should be easy to navigate, and should provide adequate information about the product and its price.

One of the key features that can make an ecommerce website different from others is the ability to set the prices of the products. This functionality allows buyers to track the prices of products they want to buy,and get notified through the bell icon when the prices go down. This functionality is the main attractive point of our website through which customers save money, and it will make them loyal to our website.

In terms of challenges, one potential issue with ecommerce websites is the need to manage inventory and fulfillment. This can be especially challenging for smaller businesses or startups, which may not have the resources to manage large inventories or shipping operations. However, with careful planning and the use of third-party logistics providers, these challenges can be overcome.

Overall, we are giving a high-quality ecommerce website, which uses modern technologies and focuses on the betterment of user experience and security.

**METHODOLOGY:**

After analyzing the task of our project, we came to know that we have to use various software development processes like extreme programming, agile process, scrum, etc. in addition to various modern technologies.

**Frontend Development:**

1. For the frontend we have used react, bootstrap, tailwind CSS,redux, font awesome and axios.
2. React was used as a JavaScript library for building the user interface, creating reusable components, and managing state and UI updates efficiently.
3. Bootstrap and tailwind CSS were used for designing and styling of the components used in our website. Tailwind CSS was really useful in styling our website.

Backend Development:

1. The backend was developed using Node.js, Express, and Mongoose for MongoDB object modeling
2. Passport was used with conjunction with bcrypt for salting and hashing for password encryption.
3. Jwt token was used for authorization.

**CONCLUSION:**

1. In conclusion, ZAPP is an ecommerce web application which successfully met the objectives and requirements defined in the problem statement.
2. Throughout the development process, careful attention was paid to the database design, backend and frontend development, testing and debugging, deployment, documentation, user training, and maintenance. The application was thoroughly tested and debugged to ensure its functionality, performance, and security. The frontend was developed using React and Bootstrap, providing a responsive and intuitive user interface. The backend was implemented using Node.js and Express.js, incorporating secure authentication and authorization using passport, bcrypt & jwt authentication.
3. To ensure security and privacy several steps were taken and the web application was thoroughly tested by giving it a wide variety of inputs and trial usage by a number of people.
4. Overall, ZAPP was an endeavor providing practical solutions to the pre-existing problems in the current scenario and it also helped our team in sharpening our technical skills and gave us a firsthand experience of working in a group.

**If you want to run ZAPP**   
Setup it like any other mern project (npm i –force on both server side and client side)  
Add a mongodb atlas connection link in the env file of the server folder.

Run using

Npm run start on client side and Npm run start:dev on server side.   
Create one start admin to login and add more categories and products and track orders.

**THANK YOU**