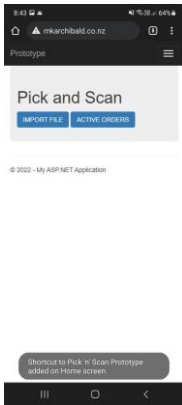


Automation Order Fulfilment

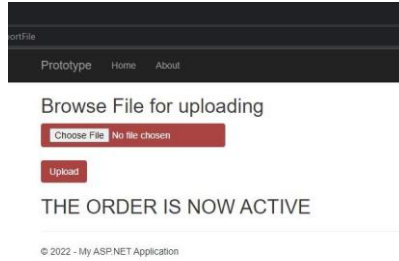
By: John Ramirez

Supervisor: Trang Do

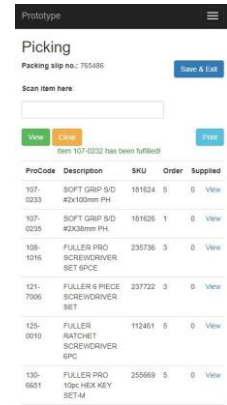
Client: M.K. Archibald & Company



Web app to mobile widget



Importing an order using a desktop



Fulfilling an order

INTRODUCTION

With the rapid pace of advancement in technology, the demands and competition among businesses have also drastically increased. Due to the demands, businesses continue to seek solutions to work efficiently and ensure customers' expectations are being met. The M.K. Archibald & Company has been part of the New Zealand hardware industry for over 100 years. With their current situation, they have come to learn more about today's modern technology and improve their order fulfillment process.

The client's concerns were about inaccuracy in fulfilling orders and the amount of paper usage required. The automation order fulfillment project has taken the responsibility to analyze and provide a solution for the client. The project goals are to streamline and simplify their warehousing management and order fulfillment process.

DEVELOPMENT

The project leader is an employee for the M.K. Archibald & Company, working as a warehouse person for almost two years. The talks about getting a better system have been going on for quite some time. The project leader's colleagues had shared their thoughts on what would be the ideal scenario for picking orders. The project opportunity came as an insight from the employees of the warehousing team who seek improvements in their current system. The project leader took on a role to discuss and provide feedback on their current system. The client had decided to explore more about the modern technologies that will benefit their business.

The project began with gathering the business outline regarding the order fulfillment process. A business proposal was created to emphasize the opportunity and benefits of turning three steps into one step. The project proposed an e-commerce website that will allow their Admins to efficiently work with customer

orders. Another solution is to use a web application for fulfilling orders. The goal is to import customer orders into the web app and use a mobile device with a Bluetooth barcode scanner.

The project had agreed to develop the web application as it weighs more benefits compared to the e-commerce website. The application was called 'pick 'n' scan' and was thoroughly planned and designed. In two weeks, a working prototype was created using Visual Studio 2019. The language used was C# based on ASP.NET Framework 4.7.2 and MVC Architecture. The database used is Microsoft SQL Server which is already integrated in the Visual Studio 2019.

With limited time, the prototype was developed in two weeks. The included features were the main tasks of the admin and the pickers. The prototype was successfully demonstrated to the client during the mid-project presentation. It was thoroughly tested and documented using a test plan.

CONCLUSION

Overall, the project had achieved its goal to provide knowledge and solution where the business can take advantage. The client will have further discussion and look at the options provided in this project. The client will be in touch about the development and the project leader will also take part if wishes.

The deliverables were produced and handed in on time for the client. Furthermore, the user manual and developer manual were included in the handover.