Globalisation brings a vast array of advantages for businesses and markets worldwide. These benefits include cultural exchange, increased capital flow, and better- valued products [1], which all can determine the success of a business. One main area of globalisation which suffers from some problems is eCommerce. Online shops are not usually designed to allow for large order lists, instead, they require the customer to manually search and add each article. Imagine having to order large quantities of small products, often with complicated names. This process can be extremely tedious and long for manufacturers, which often order small components in bulk. Unetiq[[1]](#footnote-1) has started working on a project to address this issue, allowing customers of online shops to place their orders more efficiently by automatically determining which products must be placed in the basket. This will help the user by saving time with orders and help the online shop employees when processing the order. We have been assigned to expand on their work by introducing new functionality.

*This report aims to showcase the extent of our work and how our project helped ease the process of ordering online.* Unetiq conducted some research to determine how customers of online shops frequently place their orders. One of the main ways customers store their orders is in Excel documents, therefore we were tasked with implementing a method for retrieving the files, processing them into ordered datasets and creating the basket for the user. Another type of document often used is PDF, usually in the form of invoices or lists. These PDFs needed to be processed with the use of machine learning to determine what the information dictates. We were given samples of orders compiled by our client, this helped us decide what we should research and implement. One challenging aspect of this feature is detecting the information stored in faulty data, such as mistyped words and missing fields. Lastly, the whole application must be presented in an easy-to-use interface using React[[2]](#footnote-2).

The report will be presented in the following structure. Chapter 2 will delve into analysing the problem and discussions on the conducted research. Chapter 3 will include the requirements and use cases of the project. Chapter 4 will explore the feasibility, risk and architecture of the project. The result of the project can be found in Chapter 5, along with the specific implementations of each software component. An analysis of the results, such as speed, accuracy, and ease of use can be found in Chapter 6. Chapter 7 will summarise the findings and link them back to the initial research to answer our research question.

Bibliography

[1] Partners, Globalization, "Top 5 Benefits of Globalization," 30 November 2020. [Online]. Available: https://www.globalization-partners.com/blog/top-5-benefits-of- globalization/. [Accessed 2 May 2022].

1. https://www.unetiq.com/ [↑](#footnote-ref-1)
2. https://reactjs.org/ [↑](#footnote-ref-2)