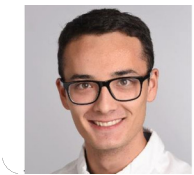


# Digitaler Briefversand

## Students



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**Introduction:** Communication in the modern business world is characterized by remarkable complexity. In addition to conventional communication methods, such as postal mail, innovative approaches have emerged that businesses can leverage. Email and messenger services like Microsoft Teams or WhatsApp have become widely adopted communication channels. The clear trend indicates a significant preference for digital communication forms. The trend shows a clear preference for digital forms of communication, which is at the expense of the still important, paper-based postal correspondence. In this work, analogue postal traffic is to be digitally enriched in order to combine the advantages of both worlds.

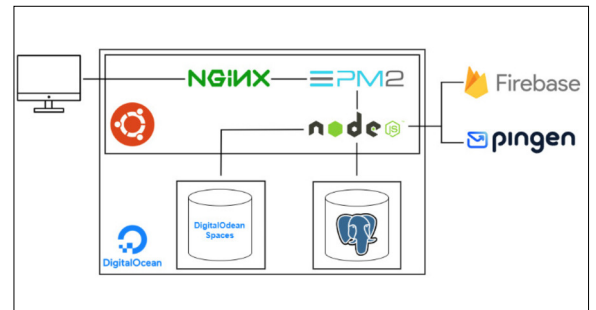
**Objective:** Within the scope of this project, a prototype of an application is being developed with the aim of digitizing postal mail. The primary goal is to create a user-friendly application that makes it easier for the sender to digitally send a letter to a recipient. If the digital route is not feasible, the application will automatically send the letter through traditional means. The prototype is designed to be easily expandable to facilitate the continuous development and implementation of new features. Another crucial aspect of the application is its broad device compatibility to ensure maximum user reach.

**Conclusion:** In the creation of the prototype for this project, we utilized the following technologies: Node.js and TypeScript were employed for the backend. Electron, in conjunction with React, also in TypeScript, was used for the desktop application. For the mobile application, we opted for Flutter. The application allows an organization to digitally send a letter to a customer via the desktop application, who then receives it through the mobile app. The

application autonomously decides whether the letter should be digitally sent to the recipient after verifying their address or if it should be physically sent if verification is not successful. In further development, the desktop application is planned to be enhanced with automatic address recognition, and the manual handling of physical mail delivery will be improved as needed.

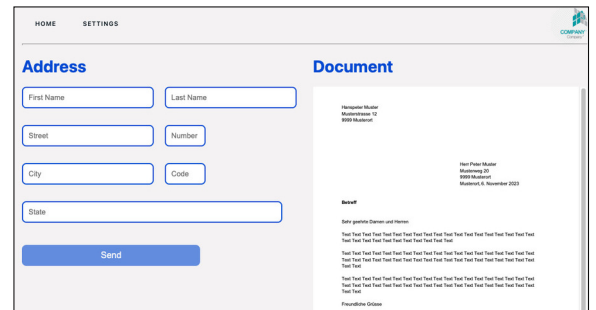
## Backend Infrastructure

Own presentation



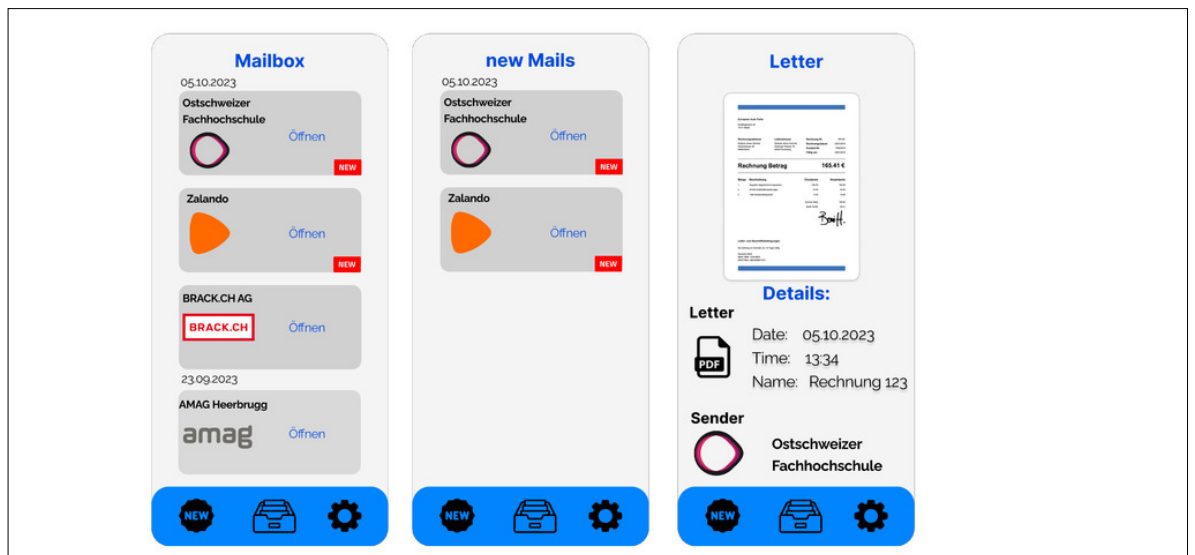
## Desktop Application

Own presentation



## Mobile Application

Own presentation



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