

## RESUME

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### ABSTRACT:

Nowadays, large amounts of waste that could be recycled are discarded incorrectly and, because of it, environmental pollution has been growing over the years and causing great losses. Knowing this, the initiative of the application COLET is to use the most advanced technologies of Software Engineering to put into practice an application that connects recycling companies with waste producers, using innovative strategies for product development based on their exerted impact on the technological market. These methods were based on the best methodologies applied within software engineering, such as BPMN, Design Thinking and Scrum, for example, and through the studies of concepts that seek to generate a better experience for the user, using adequate ergonomics and good affordances, which guarantee adequate usability. To support and guarantee a well-developed interface, prototypes, a color palette based on the ideals present in color psychology as well as the construction of empathy maps, information architectures and user journey were produced, seeking to understand and better organize the sequence of steps performed within the application, ensuring that the experience is the best possible. The purpose of this software is to provide a way of ease recycling. The project was carried out mainly with Scrum, through Sprints, Daily Scrum and Review, in addition to programming and design techniques. The results, based on different disciplines such as Software Requirements and Metrics and Interface Design and User Experience, demonstrate that the application is in constant development, aiming at improving the environment through technology and Software Engineering.

**Keywords:** Recycling, Technology, Agile Methodologies, Companies.

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