I-MERC: A MOBILE ROBOT TO DELIVER MEALS INSIDE HEALTH SERVICES

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With the aim of increasing the quality of the meals transportation service inside hospitals and health care centers (HHCC), we are developing a dedicated mobile robot to perform this service, the i-MERC. This robot is equipped with a heating system in the meals compartment which guarantees the meals temperature and prevents bacteriologic proliferation. The i-MERC also integrates a personalized diets information system where information about patients' diets can be introduced and accessed by the service personnel. This project has been developed within the compass of the Master in Engineering Design, at the Technical University of Lisbon. The product development of the robot addressed many knowledge areas, some of which are presented in this paper. We finished the first stage of the project with a service concept, a virtual prototype which included some key specifications and a physical prototype. Presently, we are continuing the product development and searching some stakeholders that would be interested in the project.

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