The system consists of a robot arm, a conveyor belt, and a camera. Differently shaped objects are placed in the pickup area. There they are detected by the camera. With the use of OpenCV AI the software will determine their shape, color, and position. The objects will also be displayed on the User Interface (UI). Their position in the pickup area and their color must correspond to their position and color on the UI. The user can select the object to be picked up and placed on the conveyor by clicking on the desired shape with their mouse. The selected object will then be grabbed by the robot arm and placed on the conveyor which will move them forward. After that a second robot arm must move the objects from the conveyor belt and place them in the unloading area.

Apart from the functional system it is also expected to deliver a class diagram made with respect to the UML standards, a state diagram and two sequence diagrams, all within the UML standards. All the work must be done in a GitHub repository.