Project title: Valet parking robot

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Project Type Hardware

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When driving, parking is an everyday problem for many. It might be difficult and time-consuming to find a place. In order to combat this, our project builds a robot car that can function in parking lots(ground floor) There will be a model of the parking lot and a starting point where the car will be taken from the user by the robot (there is a fork in the front of the robot), and then it will park the car in the empty parking lot, where there is a camera at the top. A card is used to enter the car, causing the robot to locate the closest place and pick up the vehicle. The same card is used to call the robot, which returns the car when it's time to go. The robot car has a camera to detect empty spots and a forklift to lift automobiles. If the lot is full, it notifies to save needless travels(we use Raspberry Pi4 with Camera), The goal of this initiative is to improve parking by making it quicker and less stressful to find a spot.