Product Specification

(Product concept and requirements)

Product Name:

“InPostOr”

Target Users:

Online shop owners wishing to expand delivery options for their goods.

Use cases:

1. **Delivery to Locker:**
   Actor: Customer
   Preconditions: Customer has ordered a package for delivery and has chosen a locker for pickup.

- Once the order has been placed, the customer receives a confirmation notification and a parcel number.
- Customer receives a notification that their package has been delivered to their assigned locker.
- Customer goes to the locker and scans the code provided in the notification to unlock the locker. (Alternatively provides the tracking number and claiming code)
- The locker door opens, and the customer retrieves their package.
- Customer confirms receipt of the package on the system.
- The system updates the delivery status as "delivered" and sends a notification to the customer confirming successful delivery.

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2. **Delivery to ACP:**
   Actor: Partner store
   Preconditions: Partner store has been registered and approved as an ACP for the package delivery system.

- The delivery person arrives at the partner store with the package.

- The delivery person scans the barcode on the package to update the delivery status.
- The system generates a notification to the customer, informing them that their package has arrived at the ACP.
- The customer goes to the partner store and presents the notification to the store representative.
- The store representative scans the notification to verify the customer's identity.
- The store representative hands the package to the customer.
- The customer confirms receipt of the package on the system.
- The system updates the delivery status as "delivered" and sends a notification to the customer confirming successful delivery.

Problem and solution description:

Until now, online shopping involved waiting for a courier, often without knowing at what times or on what day the package would be delivered. Through the use of ***InPostOr Lockers***, it makes online shopping more accessible to people who, for various reasons, do not want or cannot use a traditional courier service by being available 24/7. This increases the pool of potential customers for our target users.

Functional requirements:

1. Delivery Notifications: The system must provide sending and delivery notification to customers via email.
2. Lockers Management: The system must allow administrators to manage lockers, assign them to customers, and track locker availability.
3. ACP Management: The system must allow administrators to manage ACPs, add new partners, and track package deliveries to partner stores.
4. Package Management: The system must allow delivery personnel to scan and track packages, update delivery status, and manage deliveries to lockers and ACPs.
5. Package Size and Weight Limits: The system must enforce package size and weight limits to ensure that packages can fit into the lockers and that delivery personnel can safely transport packages to ACPs.

6. Pickup Time Limits: The system must enforce time limits for package pickup at lockers and ACPs to ensure timely delivery and prevent overburdening the system.
7. ~Customer Management: The system must allow administrators to manage customer accounts, view delivery history.

Non-functional requirements:

1. Availability: The system must be available 24/7 to allow customers to access their packages at any time and to facilitate deliveries to ACPs.
2. Reliability: The system must be reliable and operate with minimal downtime to prevent package delivery delays or system failures.
3. Performance: The system must have fast response times, even during periods of high usage, to ensure a smooth customer experience.
4. Usability: The system must be user-friendly and easy to navigate for both customers and administrators, with clear instructions and intuitive interfaces.
5. Scalability: The system must be scalable to accommodate increasing numbers of customers and package deliveries as the service expands.