

PROJECT CHARTER TEMPLATE

GENERAL PROJECT INFORMATION

PROJECT NAME	PROJECT MANAGER	PROJECT SPONSOR
Self-Service Kiosk	Tai Dinh	Rob James
EMAIL	PHONE	ORGANIZATIONAL UNIT
DKRV@gmail.com	123-456-7890	
GREEN BELTS ASSIGNED	EXPECTED START DATE	EXPECTED COMPLETION DATE
My-Linh Vu (Product Owner)	01/01/2026	06/01/2026
BLACK BELTS ASSIGNED	EXPECTED SAVINGS	ESTIMATED COSTS
AJ Kilmer (Scrum Master)	\$497,750	\$275,400

PROJECT OVERVIEW

PROBLEM OR ISSUE	Customers want a retail experience that will meet and even exceed their expectations. Nowadays, most retail stores face ongoing challenges like long checkout lines, limited customer assistance, and not the most optimized inventory management. In reality, retail stores are always labor intensive and often lack seamless automation.
PURPOSE OF PROJECT	Our team will develop an autonomous kiosk robot system, which is a self-service assistant that can greatly improve the overall retail experience by providing self-checkout, inventory management, and product search.
BUSINESS CASE	The biggest business benefit will be the reduction in labor costs since check-out, inventory tracking, and product inquiry will be automated. In addition to the inventory tracker, it would lead to a more efficient operation because the robot will be more accurate in tracking inventory than real employees.
GOALS / METRICS	This robotic system will stroll around the store autonomously, allowing customers to interact with it, in which they can search up the location of a certain product or check out their purchases. When there is no customer interaction with the robot, it will resume inventory management.

EXPECTED DELIVERABLES	1. Self-checkout: Customers can go up to the robot, scan their items, and pay with card or cash. 2. Inventory management: Robot will stroll through aisles to scan shelves and track inventory levels. 3. Product lookup: Customers can go up to the robot to search for item and robot will locate it.
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PROJECT SCOPE

WITHIN SCOPE	Self-checkout, Inventory management, Product lookup
OUTSIDE OF SCOPE	None

TENTATIVE SCHEDULE

KEY MILESTONE	START	FINISH
Form Project Team / Preliminary Review / Scope	01/01/2026	02/01/2026
Finalize Project Plan / Charter / Kick Off	02/01/2026	03/01/2026
Define Phase	02/01/2026	03/01/2026
Measurement Phase	03/01/2026	04/01/2026
Analysis Phase	04/01/2026	05/01/2026
Improvement Phase	04/01/2026	05/01/2026
Control Phase	05/01/2026	06/01/2026
Project Summary Report and Close Out	05/01/2026	06/01/2026
	00/00/0000	00/00/0000

00/00/0000

00/00/0000

RESOURCES

PROJECT TEAM	Tai Dinh - Project manager. AJ Kilmer - Scrum master Miz Rahman - Developer, My-Linh Vu - Product owner
SUPPORT RESOURCES	Operations, Sales, Project Management, Engineering
SPECIAL NEEDS	TBD

COSTS

COST TYPE	VENDOR / LABOR NAMES	RATE	QTY	AMOUNT
Labor	Logistics Co.	\$150.00	200	\$ 30,000.00
Labor	Rubber Factory	\$200.00	100	\$ 20,000.00
Labor	Glass Manufacturer	\$350.00	50	\$ 17,500.00
Labor	Robotics Manufacturer	\$85,000.00	2	\$ 170,000.00
Labor	Battery Vendor	\$4,850.00	2	\$ 9,700.00
Supplies	Aluminum Vendor	\$17,850.00	1	\$ 17,850.00
Miscellaneous	Third Party Software	\$10,350.00	1	\$ 10,350.00
TOTAL COSTS				\$ 275,400.00

BENEFITS AND CUSTOMERS

PROCESS OWNER	Tai Dinh - Project Manager
KEY STAKEHOLDERS	Bob Smith
FINAL CUSTOMER	200 supermarkets across the US
EXPECTED BENEFITS	It would most likely lead to higher customer satisfaction as not only does it provide faster service, but it also allows for non-human engagement, which most people prefer.

TYPE OF BENEFIT	BASIS OF ESTIMATE	ESTIMATED BENEFIT AMOUNT
Specific Cost Savings	Estimator's projections	\$ 55,000.00
Enhanced Revenues	Finance's projections	\$ 192,500.00
Higher Productivity (Soft)	Project management's estimations	\$ 17,500.00
Improved Compliance	Operations' estimations	\$ 22,000.00
Better Decision Making	Project management's estimations	\$ 88,500.00
Less Maintenance	Project management's estimations	\$ 26,000.00
Other Costs Avoided	Finance's projections	\$ 96,250.00
TOTAL BENEFIT		\$ 497,750.00

RISKS, CONSTRAINTS, AND ASSUMPTIONS

RISKS	Although there are other companies with automated kiosks, such as McDonald's with their self-order kiosk, no other company currently has autonomously moving kiosk systems with the system capabilities that we have in ours. Although our system concept is heavily inspired by BJ's autonomous robot, theirs could only perform inventory management.
CONSTRAINTS	We may have a constraint on financial and human capital. Time may be an issue later in development.
ASSUMPTIONS	We assume shipping fees for the robots will be provided by the clients.

PREPARED BY	TITLE	DATE
DKRV		05/01/2025

FINAL PROJECT

MGS 405 - Section 2



Tai Dinh
Miz Rahman
AJ Kilmer
My-Linh Vu

PROJECT VISION

Business Problem

“People like consistency. Whether it’s a store or a restaurant, they want to come in and see what you are famous for.” - Mickey Drexler, Former CEO and current Chairman, J. Crew Group.

- Customers **expect** consistent, high-quality retail experiences.
- Retail stores often suffer from **long** checkout lines and **slow** service.
- **Limited** in-store assistance can frustrate customers.
- Inventory is **not always** tracked or restocked efficiently.
- Retail operations remain highly **labor-intensive** with **minimal automation**.

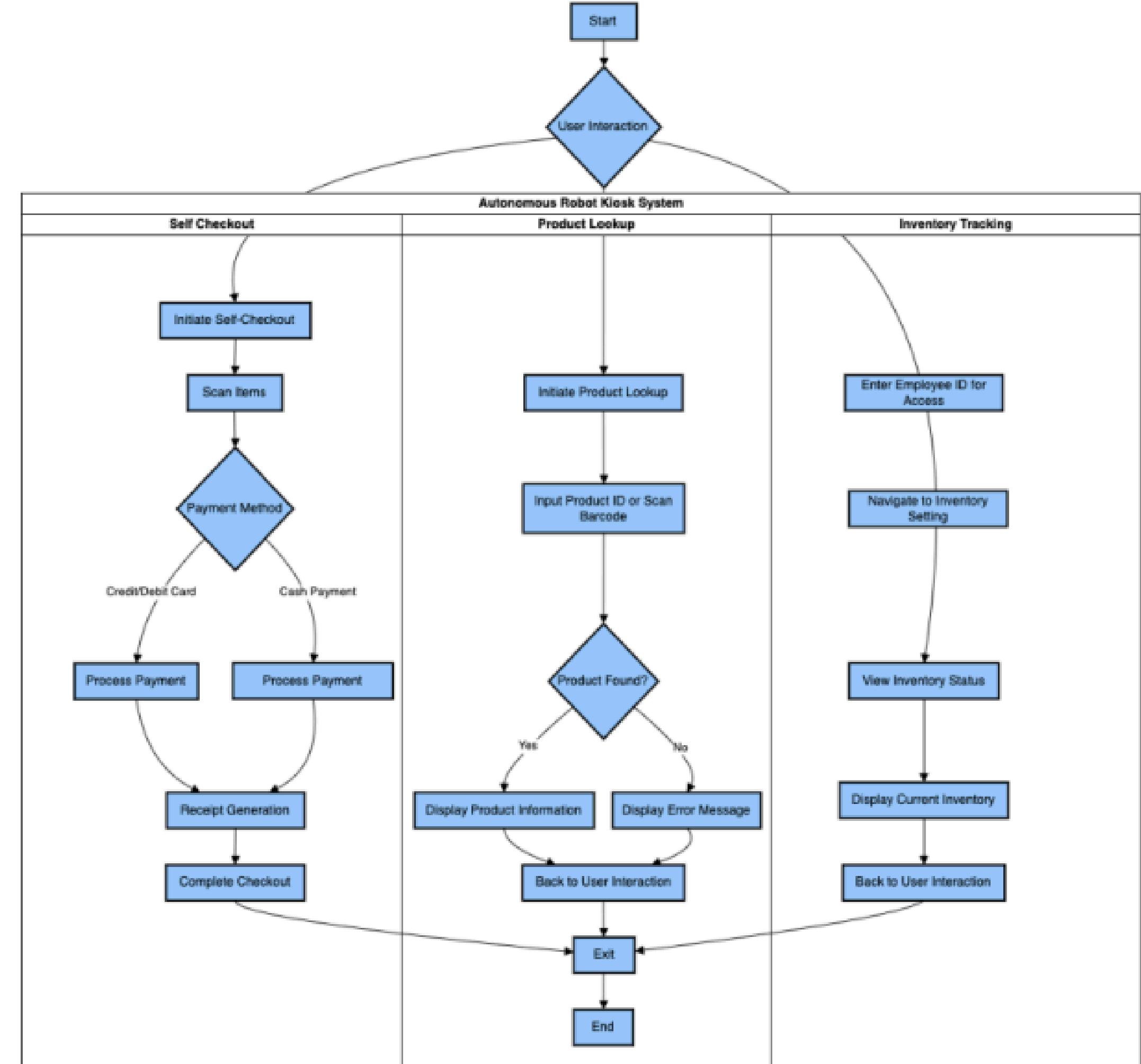
PROJECT VISION

System Capabilities: *of our autonomous robot kiosk system*

1. Self-checkout: Customers can go up to the robot, scan their items, and pay with card or cash.
2. Inventory management: Robot will stroll through aisles to scan shelves and track inventory levels.
3. Product lookup: Customers can go up to the robot to search for item and robot will locate it.

Let's visualize this with an:

ACTIVITY DIAGRAM



PROJECT VISION

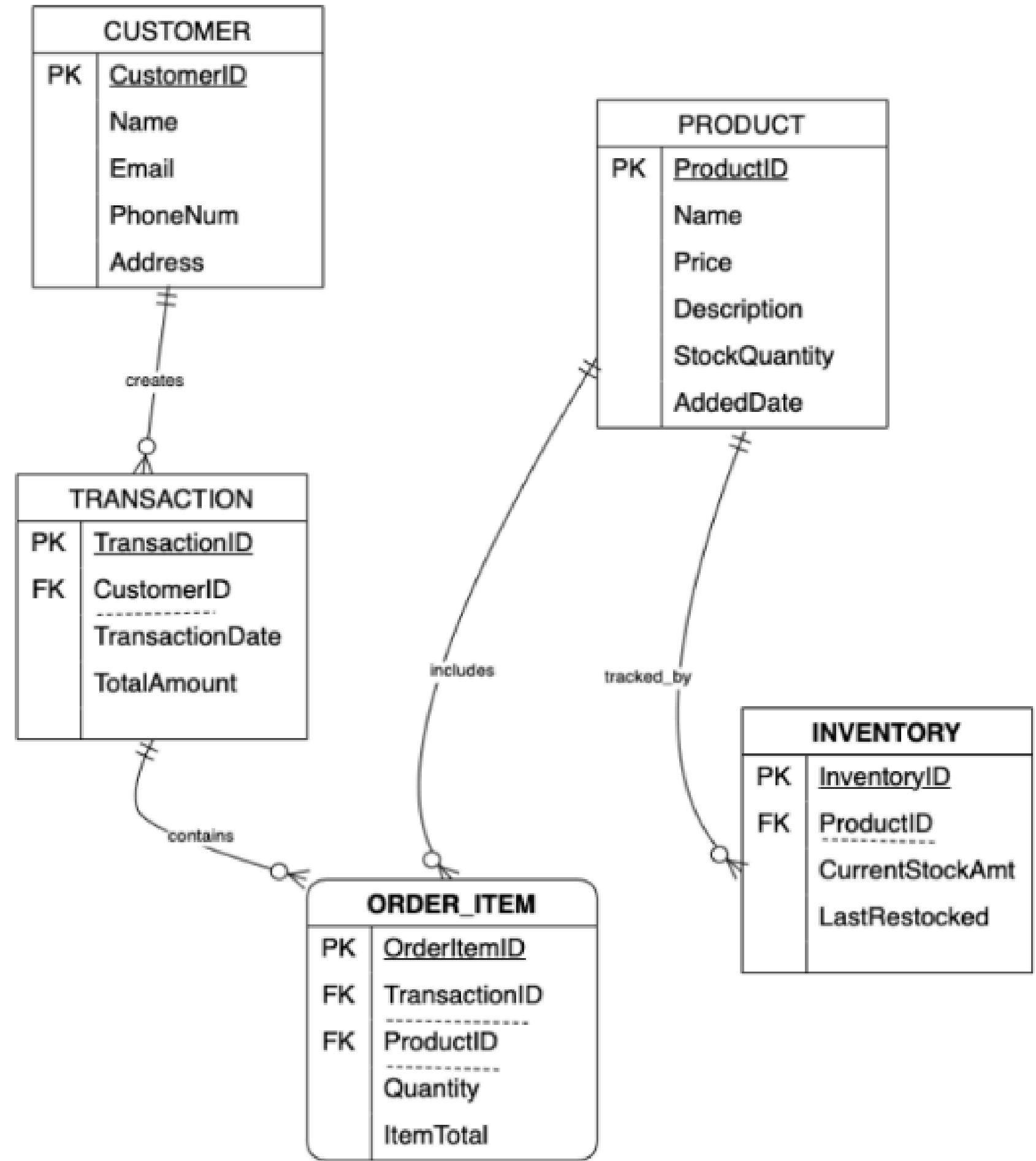
Business Benefits

- Reduces labor costs by **automating** checkout, inventory tracking, and product inquiries.
- Improves operational efficiency through more **accurate**, real-time inventory tracking.
- Enhances customer satisfaction with **faster service** and provides non-human engagement.

And let's dive into the:

ERD DIAGRAM

ERD Diagram



COST/BENEFITS ANALYSIS GRID

	Yr1	Yr2	Yr3	Total
Cost	-150	-75	-50	-275
Benefit	50	150	300	500
Impact	-100	75	250	225

KEY RISKS

Although there are other companies with automated kiosks, such as McDonald's with their self-order kiosk, no other company currently has autonomously moving kiosk systems with the system capabilities that we have in ours. Although our system concept is heavily inspired by BJ's autonomous robot, theirs could only perform inventory management.

TIMELINE

Phase/Month	1	2	3	4	5
Planning					
Design					
Development					
Testing					
Deployment					

TEAM ROLES

Tai Dinh - Project manager: will oversee all project scope.

AJ Kilmer - Scrum master: will ensure dev team stays on track and remove impediments.

Miz Rahman - Developer: will implement the components of the robot system.

My-Linh Vu - Product owner: will define product vision and requirements.

REPORTING PLAN

Meeting	Timing
Weekly Status	Weekly
Steering Committee	Monthly

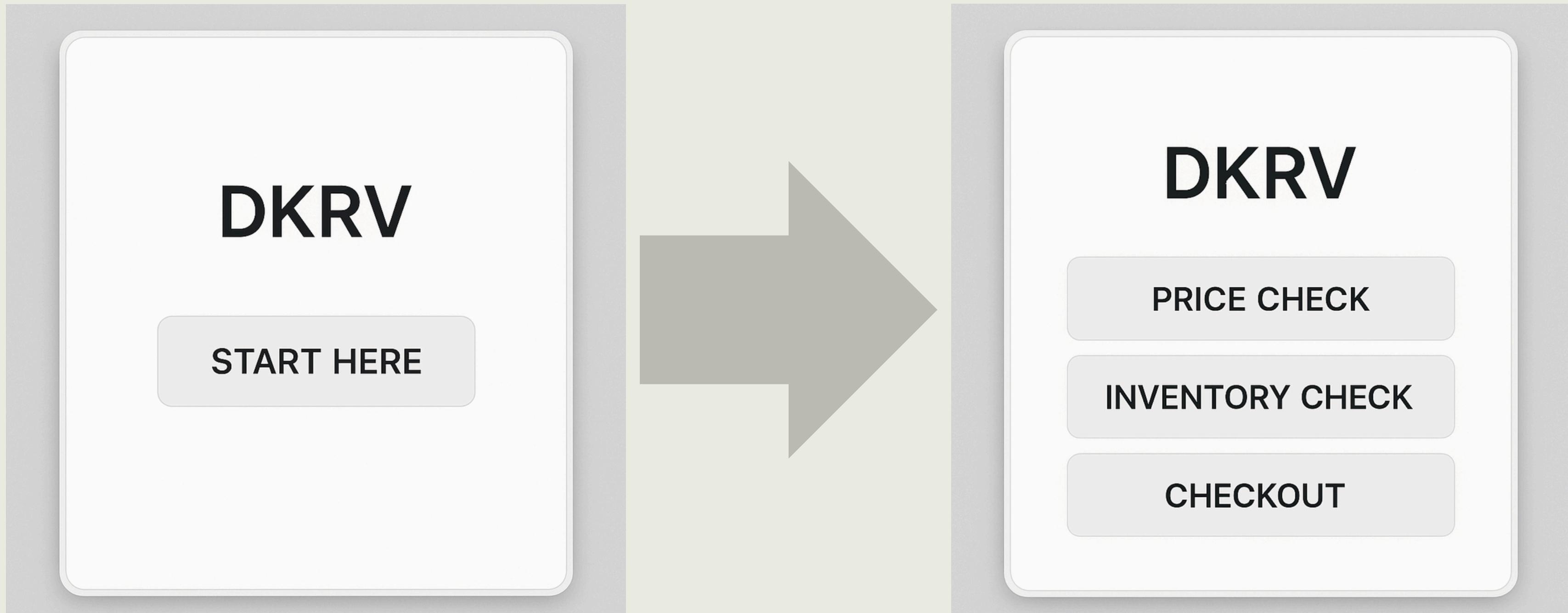
APPROVALS

Role	Name	Date
CEO	Smith	April 1
CFO	Jones	April 1
Proj. Sponsor	James	April 1

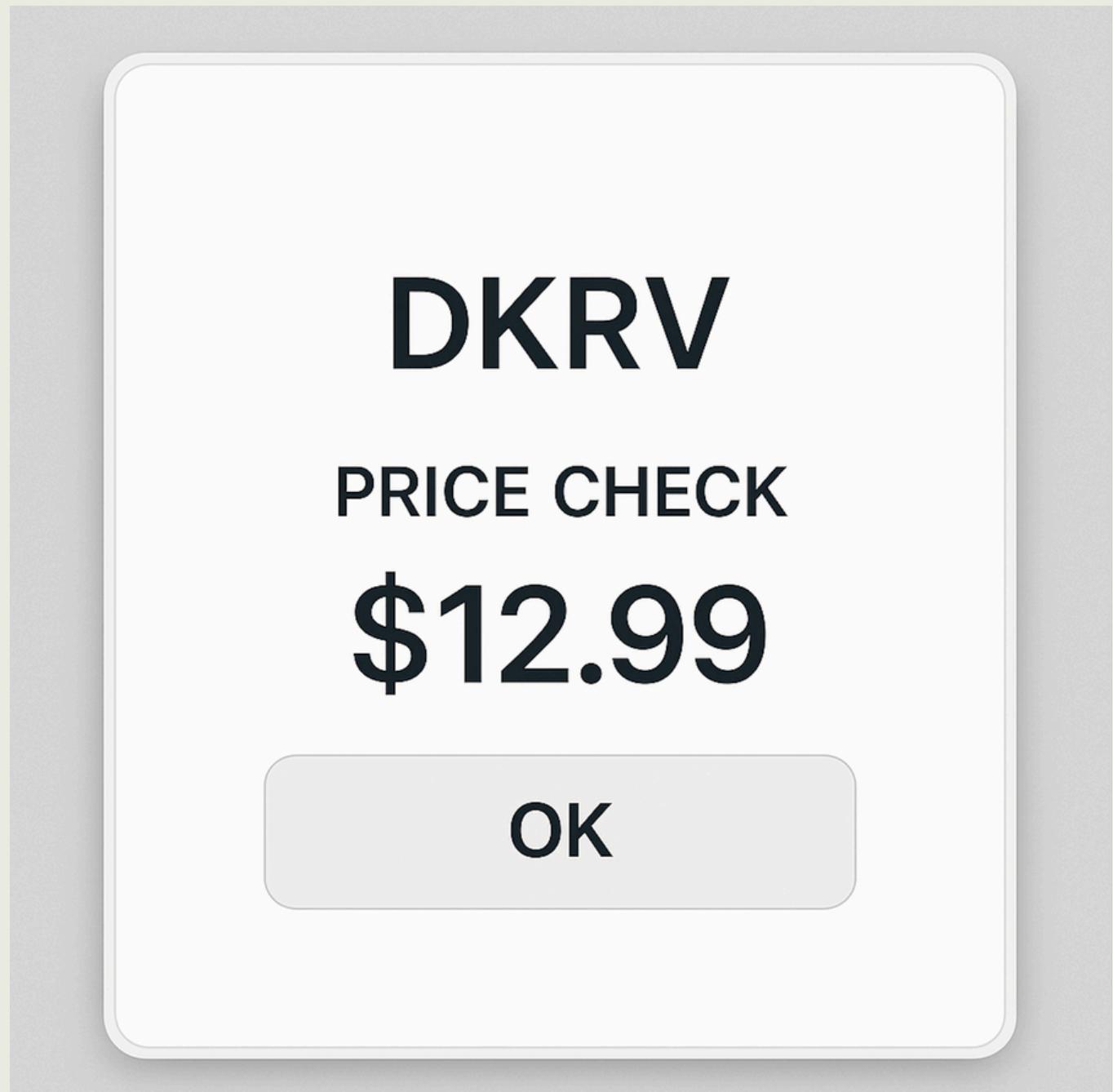
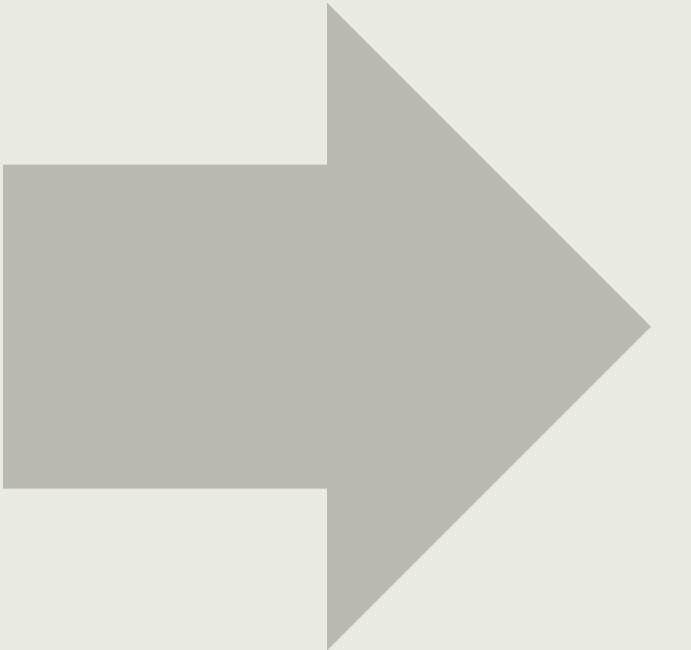
PROJECT USER INTERFACE

- Start Screen – “Start Here” button, will prompt robot to open main menu
- Main Menu – Display buttons for “Price Check”, “Inventory Check”, and “Checkout”
- Price Check Screen – Scan or search for an item, and then show price
- Inventory Check Screen – Search for an item, show stock availability
- Checkout Screen – Scan and add items, display total, option to pay
- Thank You & Goodbye Screen

PROJECT UI START MENU



PROJECT UI PRICE CHECK



PROJECT UI INVENTORY

DKRV

INVENTORY CHECK

Type product name

DKRV

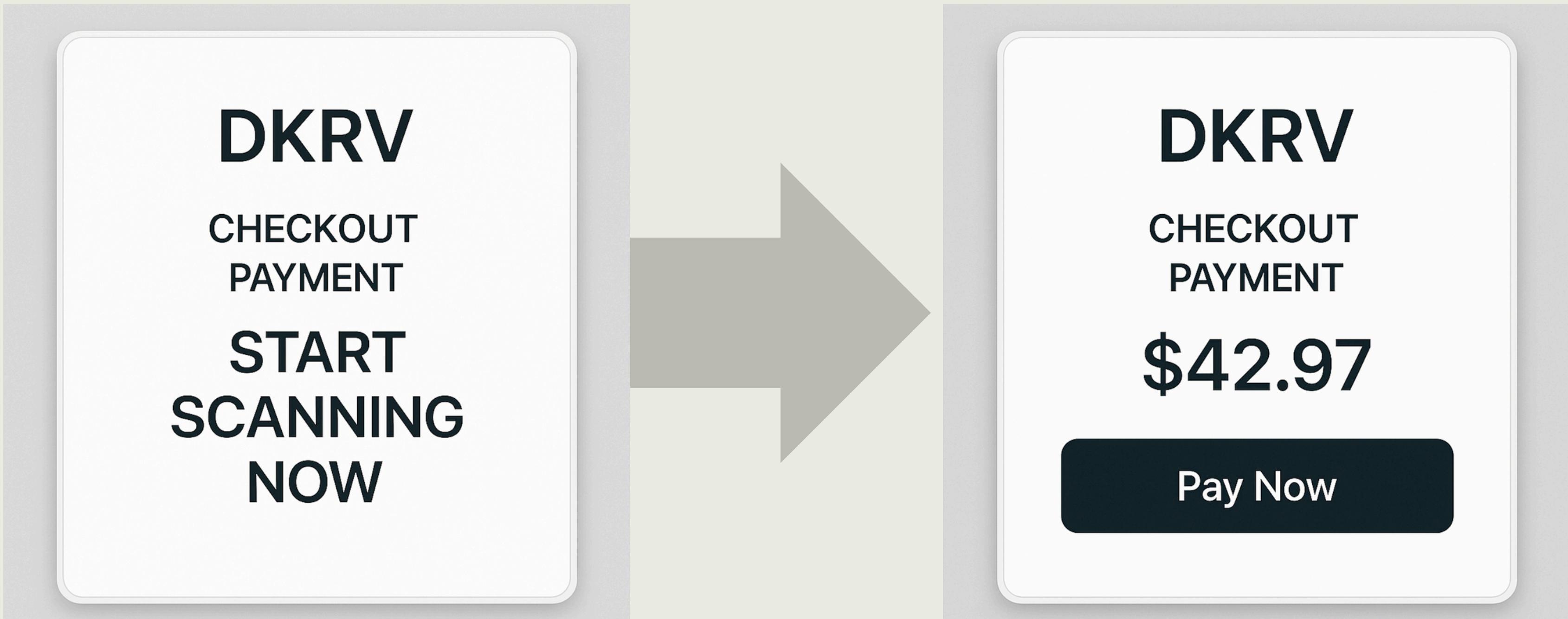
INVENTORY CHECK

5 AVAILABLE

LOCATION A3

\$12.99

PROJECT UI CHECKOUT



PROJECT UI THANK YOU



Thank you.

