Self-Checkout Application

Chapters Self-Checkout

COMP 246-011

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# Vision Statement

## Problem Description

A Chapters in Toronto is looking for a self-checkout application to use in their store as an alternative to paying at their cash registers. Customers who use this application should be able to use their phone to scan the barcode of books which will then be added to their shopping list. Customers should then be able to pay through their phone and receive an electronic receipt.

## System Capabilities

* Able to scan the barcodes of books
* Create a shopping list of all the books to be bought
* Show store promotions
* Create customer analytics
* Create, read, update, and delete customer payment information
* Pay for the books though the application
* Displays receipt to the customer and sends receipt to the customers email
* Create an account on the app to access the features.
* Comment and rate about the book and shopping experience
* Filter by category, allowing better customization and matching of an appropriate program depending on the customer’s needs and interests.

## Business Benefits

* Increase customer satisfaction
* Improve customer transaction time
* Reduce customer lineups
* Increase the likelihood of sales
* Make books searching, ordering, and scanning easily accessible.
* Allow companies to save money. Advertising through social media is cheaper than printing media, radio, television, etc.

# Use Cases & Actors by Subsystem

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| --- | --- |
| Registration Subsystem | |
| **User case** | **User/actors** |
| Create account | Customer |
| Update account | Customer |
| Delete account | Customer, Administrator |
| View account | Customer, Administrator |
| Reset password | Customer, Administrator |

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| --- | --- |
| Sales Subsystem | |
| **User case** | **User/actors** |
| Search items | Customer, Administrator |
| View items info | Customer, Administrator |
| Add to cart | Customer, Administrator |
| Remove from cart | Customer, Administrator |
| Clear cart | Customer, Administrator |
| Checkout | Customer |

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| --- | --- |
| Administration Subsystem | |
| **User case** | **User/actors** |
| Generate Sales report | Administrator |
| Check inventory | Administrator |
| Add items | Administrator |
| Update items | Administrator |
| Delete item | Administrator |
| Update store information | Administrator |
| Add promotions | Administrator |
| Update promotions | Administrator |
| Delete promotions | Administrator |

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| --- | --- |
| Inventory Subsystem | |
| **User case** | **User/actors** |
| Create transaction log | Administrator |
| Update transaction log | Administrator |
| Delete transaction log | Administrator |
| Add stock | Administrator |
| Update stock | Administrator |
| Delete stock | Administrator |

1. Scanner

* Scan barcode

# Users Stories for each goal listed by subsystem

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| --- | --- | --- |
| Use Case | User Story | Acceptance Criteria |
| Create account | As a customer, I want to create an account, so I can use Chapter’s Self-Checkout App. | 1.       Internet access is required.  2.       Customer information is needed.  3.       Information needs to be verified.  4.       Customer information should be stored on database. |
| Add to cart | As a customer, I want to add an item to my cart, so I can buy it. | 1.       Select the items to be scanned.  2.       Scan the item.  3.       Adding the item to cart on screen. |
| Checkout | As a customer, I want to purchase all the items on my cart, so I can get the receipt and leave the store. | 1.       Customer confirms the item on cart.  2.       Customer chooses the payment options.  3.       Confirm the payment.  4.       Customer receives electronic receipt.  5.       Customer shows the proof-of-payment to staff. |
| Add items | As an administrator, I want to add items to the stock, so the item can be sold. | 1.       Store receives new shipment of items.  2.       Add items to the database. |
| Add promotion | As an administrator, I want to add promotions to the item, so the item can be sold at a discount price. | 1.       Promotional information is given to the administration.  2.       Adds promotional information to the items in database. |

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| **Record** | | | |
| **Date** | **Time** | **Members** | **Tasks** |
| 9/14/2018 | 1:51 – 4:00 pm | Lyle, and Cong | - Developed the project idea  - Created the word document  - Wrote the vision statement rough draft |
| 9/21/2018 | 1:50 – 3:17 pm | Lyle, Cong, Danyang, Jaykumar, and Amarbir | - Added new ideas to vision statement  - Decided subsystems  - Discussed and agreed on use case names |
| 9/25/2018 | 2:20 – 3:10  pm | Lyle, and Danyang | - Added user stories |
| 9/25/2018 | 4:50 – 5:30 pm | Lyle, Danyang, Jaykumar, and Amarbir | - Added use cases & actors by subsystem  - Started creating use case diagrams  - Added user stories for each goal listed by subsystem |
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