

Agenda

- Lecture
 - Personas
 - User Stories
 -

Your Turn

- Find a partner
- Create a persona for one of the following
 - TTC Wheel-Trans rider using an online booking system
 - A person who has the Toronto Star delivered every day
 - Grocery Gateway shopper

User Stories

User Stories

- “User stories are composed of three aspects:
 - a written description of the story used for planning and as a reminder
 - conversations about the story that serve to flesh out the details of the story
 - tests that convey and document details and that can be used to determine when a story is complete”
 - Mike Cohn, User Stories Applied
- Typical format: As a _____, I can _____ so that _____.
 - Example: As a user, I want to be able to have some but not all items in my cart gift wrapped.
- Can include other details, but should be able to fit on an index card

Good

User Story #57

As a Shopper, I would like to have a receipt for my purchase.

Better

User Story #57

As Sam (a budget shopper), I would like to have a receipt for my purchase that lists the price and any discounts, so that I have a record of my purchases.

The receipt should also have a date and be laid out nicely. (see attached example)

Good

User Story #60

As a Retailer, I want to offer items on sale for a reduced price for a limited time, so that I can increase traffic in the store.

The price reductions in this User Story can be a percentage reduction or a straight reduction to a lower price.

Better

User Story #60a

As Kate (a store manager), I want to offer a flat rate discount on items.

User Story #60b

As Kate (a store manager), I want to offer a percentage discount to senior citizens on Tuesdays.

User Story #60c

As Kate (a store manager), I want to log which discounts are used on which days of the week.

Good

User Story #70

As a Customer, I want to have a help button that summons a Cashier if I'm having difficulty.

User Story #71

As a Retailer, I don't want to have a help button that summons a Cashier because it wastes employee time.

Better

User Story #71

As Kate (a store manager), I want to configure whether a button to request help is available, so that I can manage my personnel costs.

User Story #71

As Kate (a store manager), I want a help button to be available to customers when the throughput rate of transactions drops below a threshold, so that I can maximize store income.

Your Turn

- Find a partner
- Write 5 user stories for a self-check out system

Example: Architectural Spike

User Story #1

As a Shopper, I would like to purchase an item by scanning the UPC, so that I don't have to type in such a long number.

- **Conversations**

- What kinds of items have UPCs? -cans, boxes, bottles
- What kind of scanning hardware? API? -yes
- Formats for UPCs? -multiple, but standardized
- Looking up prices? -head office maintains a database
- Payment? -cash, credit, debit, gift card
- Buying multiples? -don't know

- **Test Cases**

- Scan 1 item into empty cart, check that contents of cart are correct
- Scan 1 item into non-empty cart, check contents

Test Cases Drive Design

- A virtual shopping cart is a container for grocery objects
 - Add
 - Check contents
 - Remove?

Strategy: Stubs and Mock Objects

- Method stubs and mock objects
 - A place-holder with agreed-upon interface
 - Little or no computation
 - Can return a fixed number
 - Can be checked in to revision control to enable working in parallel
- Serve as interfaces to complex components
 - Simple design
 - Build up complexity as test cases are added
- May not want to use actual services during development and testing
 - Slow database
 - Bank transactions

Expanding Functionality

User Story #3

As a Shopper, I would like to pay for my groceries, so that I can take them home.

- **Conversations**

- Hardware? API?
- Types of payment accepted? -cash, credit, debit, gift card

- **Test Cases**

- Identify balance to be paid, pay, and check that balance owed is 0.

Expanding Functionality

User Story #2

As a Shopper, I would like to buy produce, so that I can have fresh food.

- Conversations

- Test Cases

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