SKY TECHNOLOGY UNATTENDED PROGRAMMING TEST

PRODUCT SELECTION

Scenario

A groundbreaking broadcaster has decided to trial some new channels to its customers. A software engineering team, developing the customer website, is working on the story below.

The Account Management team has partnered with the Sales team that provides a service that offers channel subscriptions to certain customers, based on where they live.

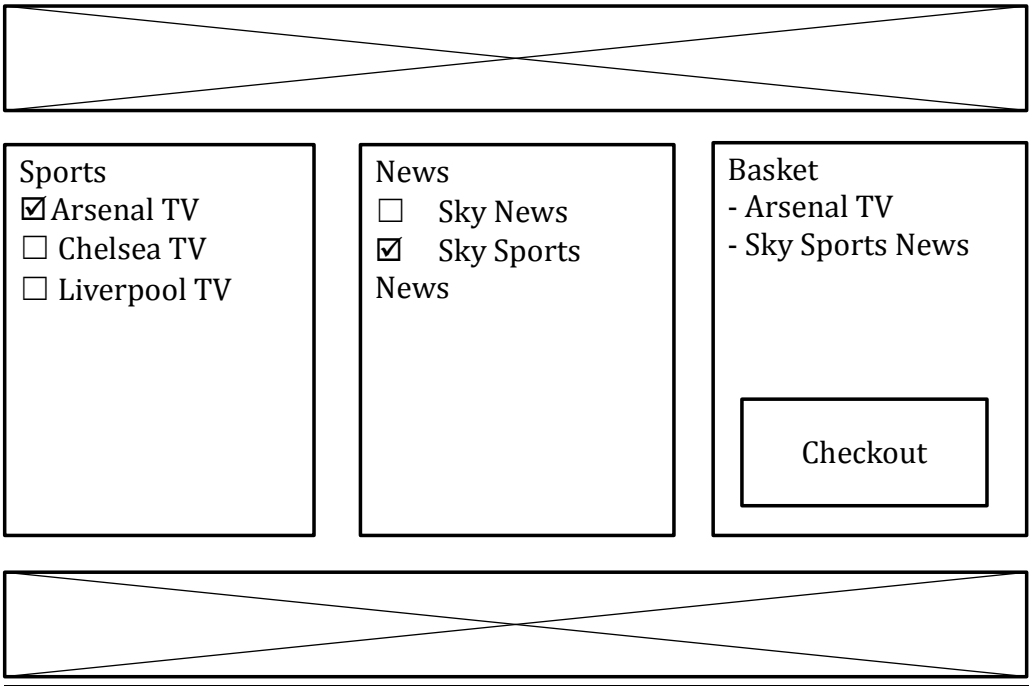
> **Display customer's available products**
>
> As a **customer**, I want to select the **products** that are available to me, based on the **location** of my home.

Instructions

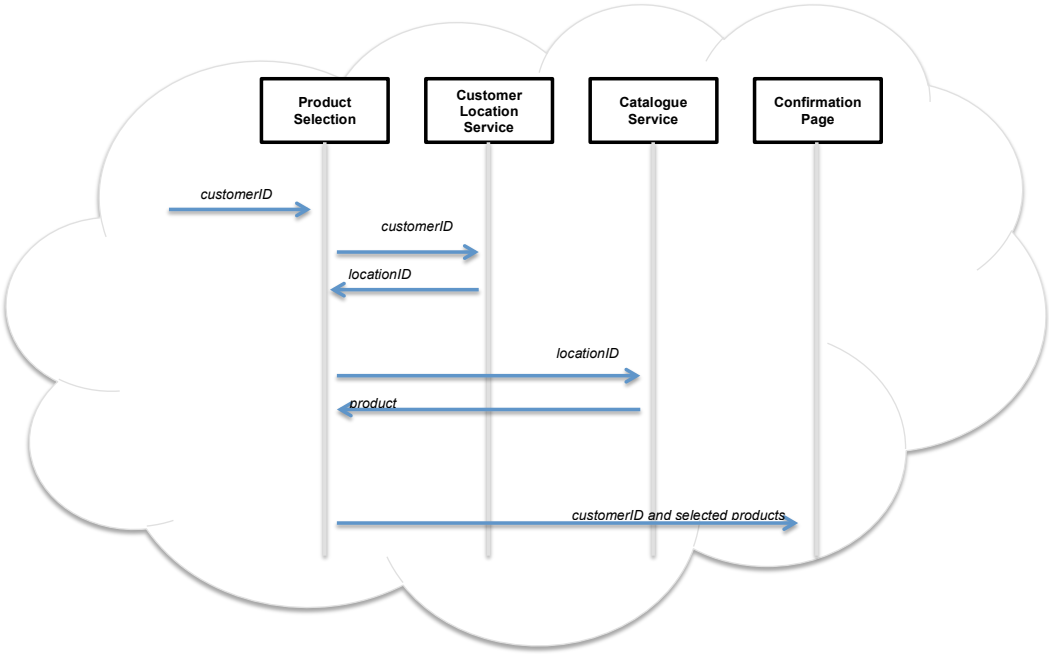
You are required to provide an implementation of a catalogue service and a product selection web page. You may use any programming language/s you like.

Background

To help, U/X have created the following wireframe of the product selection page.



When the user visits the product selection page, it can be assumed a cookie named *customerID* will be present, which will hold a customer identifier.



The Customer Location Service will be called to get the customer's location.

The Catalogue Service will be called to get the catalogue of available products.

The customer will add products to their basket and checkout, submitting their selection to the confirmation page.

Acceptance Criteria

Product Selection Page

You are required to provide a web page so that

- **when the customer selects or unselects a *product*, the basket is updated to show the selected *products*.**
- **when the customer chooses to *checkout*, the customer is taken to the confirmation page.**
- **when the customer chooses to *checkout*, the customer's *customerID* and list of selected *products* are posted to the confirmation page.**

Confirmation Page

A *Confirmation Page* will be available, which accepts the *customerID* and the selected *products*.

- **You are required to provide a stub of the *confirmation page*.**

CustomerLocationService

A *CustomerLocationService* is available which will take the *customerID* as an input and return one of the following outputs.

Customer Service Output	Description
A location identifier	Customer is valid and a *locationID* is returned
Failure exception	There was a problem retrieving the customer information

- **You are required to provide a stub of the *CustomerLocationService* interface.**

CatalogueService

The *locationID* returned from *CustomerLocationService* should be passed to a *CatalogueService*, which must return the following *products*.

Category	Product	Dependent on *locationID*
Sports	Arsenal TV	LONDON
Sports	Chelsea TV	LONDON
Sports	Liverpool TV	LIVERPOOL
News	Sky News	
News	Sky Sports News	

The *CatalogueService* will only return ArsenalTV and ChelseaTV if the *locationID* is LONDON.

The *CatalogueService* will only return LiverpoolTV if the *locationID* is LIVERPOOL.

The *CatalogueService* will always return Sky News and Sky Sports News.

- **You are required to provide an implementation of the *CatalogueService*.**

What we are looking for

We are interested in

- how you structure your code so that it's
  - fully tested
  - easily extensible
  - easy to modify
  - easy to understand by others
  - complies with best object-oriented practices
- evidence of TDD, BDD and web testing
- knowledge of front-end AND back-end development
- evidence of ability to create eloquent and responsive web pages.

We do not expect a polished website design for this test so please do not spend too much time on the look and feel of the web page, but we do enjoy demonstration of proper software engineering front-end techniques.

Please supply us with your source code, a README file that explains how to build and run your submission, build scripts and any tests you have written.

We expect this test to take approximately 3 hours.