Semester Project 2023

INFT2508 Kryss-plattform applikasjonsutvikling for mobile enheter

This assignment is the mandatory requirement for the course to be approved. Students can either implement a mobile application using react-native CLI based on the product requirements as described below in this document or the students can propose a product (a mobile app description) on their own that they would like to do as a part of their semester project. If the students propose the product description by themself, it must be approved by the subject teacher by 4th Nov 2023.

Submission/Project Requirements

1. The **submission deadline is 1 December 2023, kl 14:00**.
2. The required materials should be submitted in **Inspera** (not in the blackboard)
3. Submission materials
   3.1. Each student must record and submit a presentation video of max 25 minutes. The presentation video should contain following parts
      3.1.1. product description or features
      3.1.2. design decision or main components
      3.1.3. product demo
   3.2. Each student should also submit a runnable project code (excluding node_modules and ios/Pods folder). In the project source code, the following concepts and principles should be used
      3.2.1. Reusable components including styling
      3.2.2. States (useState and useEffect hook functions)
      3.2.3. Multipage application using react-navigation
      3.2.4. Dynamic data (using files or API servers like j*son-server* or *ngrok* server)
      3.2.5. Internationalization (support for at least 2 different languages)
      3.2.6. Use of maps solution is optional but recommended
      3.2.7. Use of device sensors is optional but recommended
4. Note that plagiarism is discouraged. If the source code of two or more students is significantly the same (for example, matches 60% or above), all of them will most probably not be approved.

Example product description (including sample wireframes)
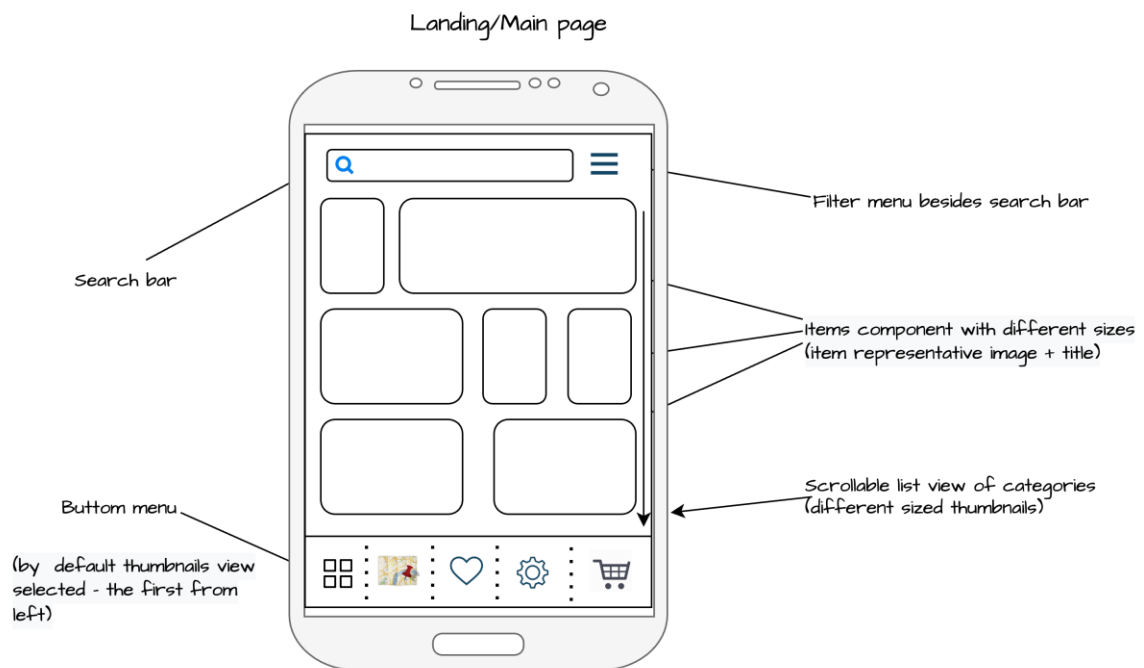
The product is an e-commerce (food) marketplace like app where sellers can list their items and potential buyers can see and buy them. The focus of the app is on display of items. Note that buying items and making payments through this app is not the scope of this semester project.

One similar example out there in the market is **Foodora App**: https://apps.apple.com/us/app/foodora-norway-food-delivery/id998930867 or
https://play.google.com/store/apps/details?id=de.foodora.android&hl=en&gl=US

The product will have the following features. Additional features can be optionally added. Note that a few wireframes are included in the project description, and students should design themselves whenever additional designs or wireframes are needed.
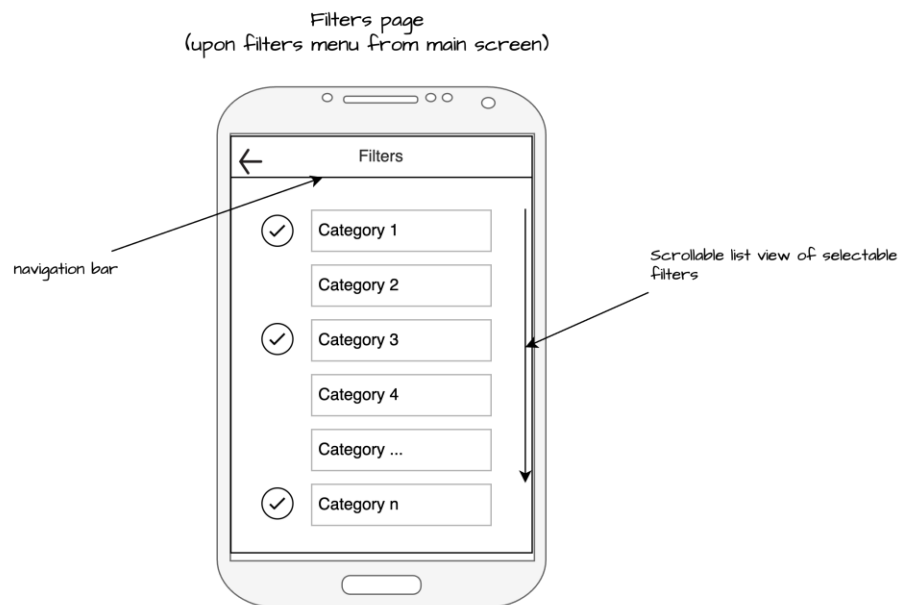
1. The main or landing page.
   1.1. It should have a search bar towards the top
   1.2. It should have a filter menu towards top-right
   1.3. It should display list items in a scrollable view in the middle of the screen. List of items should be retrieved from a demo server using REST API calls. Demo API should be designed by the students themselves.
   1.4. The bottom part of the screen contains a tab like main menus and have following menu items
       • The thumbnail tab menu – this is selected by default. That means items by default shall be displayed as lists as shown in the figure below.
       • The map tab menu – this is an optional feature. When use selects this menu tab, the items will be displayed in
       • The bookmarks tab menu – this will display only bookmarked items on the screen (more on this described later!)
       • The settings tab menu – which will allow used to dynamically change language or themes/styles in the app
       • Shopping cart – which will show all items that the user selected to buy and total price calculations. The payment part itself is not mandatory for the assignment

Landing/Main page

Search bar

Filter menu besides search bar

Items component with different sizes (item representative image + title)

Scrollable list view of categories (different sized thumbnails)

Buttom menu

(by default thumbnails view selected - the first from left)

Landing/Main page (map view)

Filter menu besides search bar

items indicated by map location markers

Buttom menu

(User can select 'Map view')

https://github.com/react-native-maps/react-native-maps
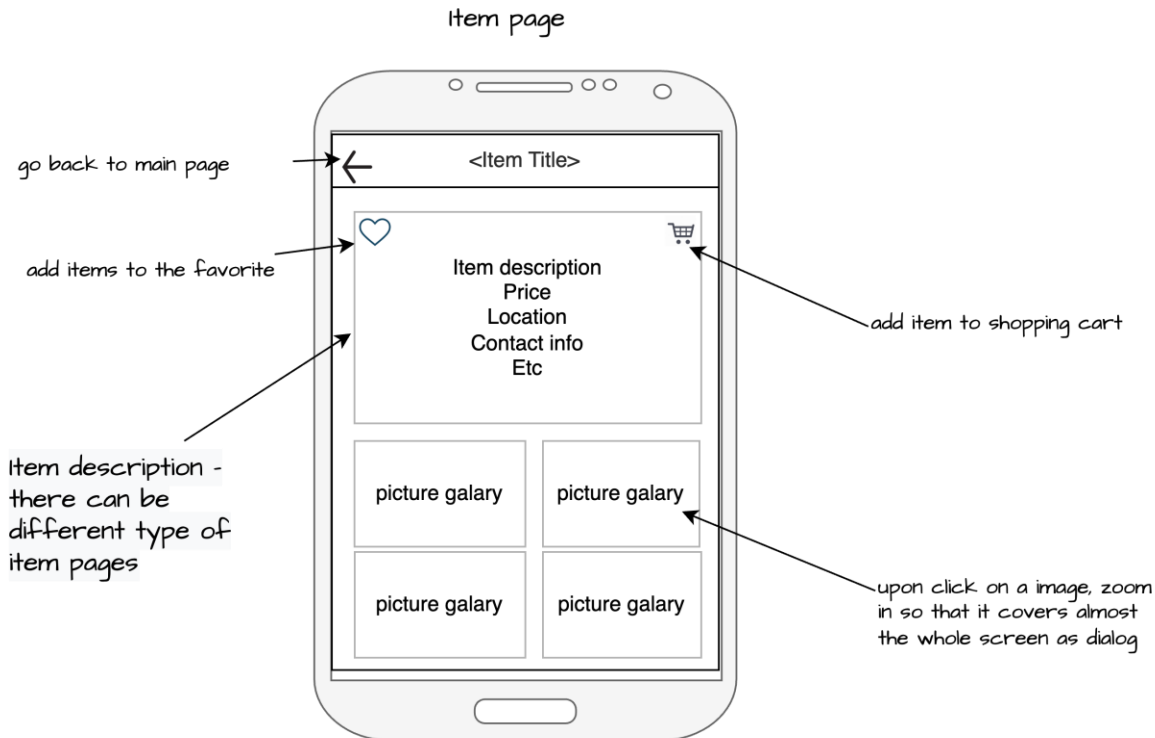
2. The filters page – this page is displayed when user clicks on the 'filters menu' located at the top-right of the main page.
   2.1. This page allows users to select or deselect categories or sub-categories or filter by locations
   2.2. This page allows users to navigate back to the main page via navigation bar

Filters page
(upon filters menu from main screen)

Filters

Category 1

Category 2

Category 3

Category 4

Category ...

Category n

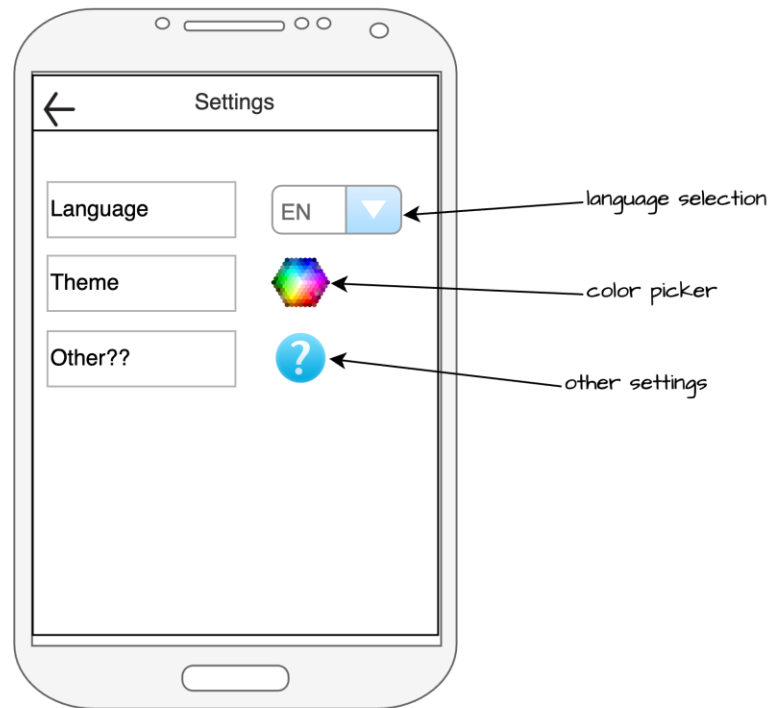navigation bar

Scrollable list view of selectable filters

3. The item details page – this page is displayed when user clicks on an individual item displayed in a main page.
   3.1. The item details include information about the item such as item description, price, location, contact information of the seller and so on.
   3.2. This page also includes pictures gallery of the related item.
   3.3. The user should be able to bookmark an item by - for example by clicking the bookmark logo displayed on the top-right corner of the items page.
   3.4. The user should be able to add the item in the shopping cart and buy the item

Item page

go back to main page

<Item Title>

add items to the favorite

Item description
Price
Location
Contact info
Etc

add item to shopping cart

Item description - there can be different type of item pages

picture galary   picture galary

picture galary   picture galary

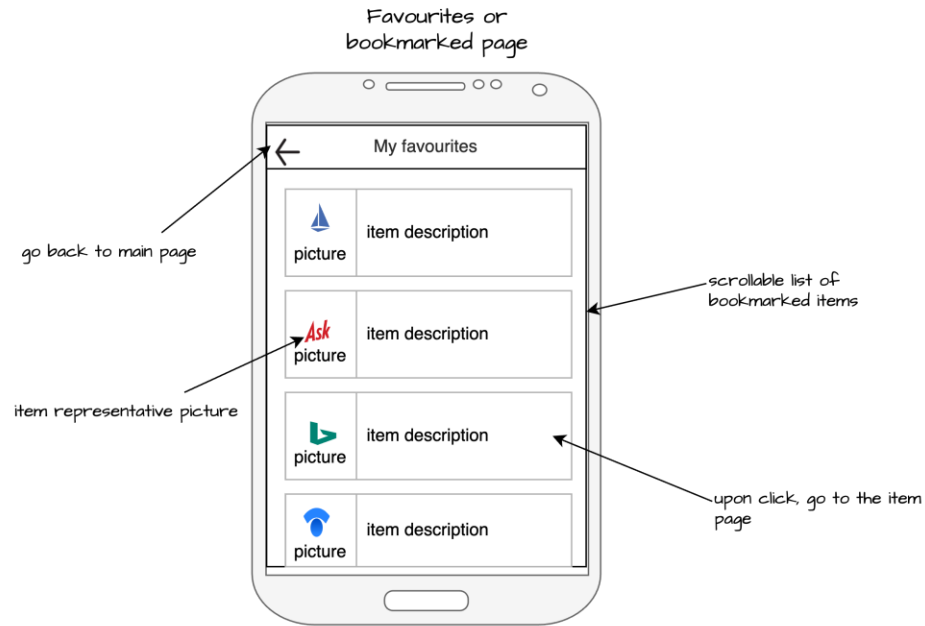upon click on a image, zoom in so that it covers almost the whole screen as dialog

4. The settings page – this page allows users to change settings in the app. Some examples of settings usage are as follows
   4.1. Allows users to change language in the app based in English and one another language for example Norwegian
   4.2. Allows users to change the background theme color for the app using color pallet or other mechanisms

Settings page

5. The bookmarked page – this page will be displayed when user clicks on the 'bookmark tab menu' located in the bottom of the main page.
    5.1. List of bookmarked items displayed in scrollable view
    5.2. Each item component has two parts – representative image and item title
    5.3. On clicking an item, user will be navigated to the item details page

My favourites

go back to main page

picture | item description

scrollable list of
bookmarked items

Ask
picture | item description

item representative picture

picture | item description

upon click, go to the item
page

picture | item description

6. Shopping cart page: It should display summary of items in the cart, additional recommendations, and options to reset cart or pay (confirm the orders)

Shopping cart page

My shopping basket

go back

some icon   Summary
(f. eks item list with individual price
+
total sum
+
estimated delivery time, etc)

summary of items on the
cart

picture | picture | picture

RESET   :   PAY

horizontally scrollable
additional recommended
items, based on the items
in the cart