Project Part 2

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Title: What To Wear Weather

Project Summary: Most people do not care about about specifics of the weather like temperature and humidity but are more interested in things like what clothes to wear or how event plans may be affected. Our project is an Android application which tells users what kind of clothes they should be wearing based on the weather in their local area while not displaying information about the weather users are not interested in.

Requirements:

User Requirements		
ID	Requirement	Priority
US-001	As a user, I want to see daily clothes recommendations when opening the app	Critical
US-002	As a user, I want to select a recommended clothing item and be given shopping recommendations	Medium
US-003	As a user, I want to be able to swipe the screen left or right and change the forecast day	High

Functional Requirements		
ID	Requirement	Priority
FN-001	On app startup, current GPS coordinates will be retrieved	High
FN-002	App will move between portrait and landscape mode	Medium
FN-003	App will use weather API to get weather at current GPS	High
FN-004	Use a relational database to hold user data (age, gender)	High
FN-005	Use a relational database to have sponsored brands	Medium

Non-Functional Requirements		
ID	Requirement	Priority
NF-001	Coordinates will use the Android system's fastest "best guess"	Low
NF-002	Storage of user's settings/locations/outfits will be persistent	Medium
NF-003	App will respond quickly and precisely to user touch/interaction	Medium

Users and Tasks:

Use Case ID:	UC-01
Use Case Name:	Setting Personal Preferences
Description:	User imputs personal preferences in settings when application is ran for the first time.

Actors:	Application User		
Pre-Conditions:	User personal preferences have not been set		
Post-Conditions:	User preferences set		
Frequency of Use:	One time		
Flow of events:		**Actor Action**	**System Action**
	1	User Opens application	System sees empty profile preferences and takes user to profile screen
	2	User enters personal profile preferences	System saves preferences in database
	3		System takes user to home "clothes forecast" screen

Use Case ID	UC-02
Use Case Name	View clothes recommendations
Use Case Description	User inputs personal preferences in settings when application is ran for the first time.

Actors	Application User		
Pre-Conditions	User settings have been set		
Post-Conditions	User viewing clothing recommendations		
Frequency of Use	Every time application is opened		
Flow of events		**Actor Action**	**System Action**
	1	User Opens application	System sees completed user preferences and loads clothes recommendations
	2	User views clothes recommendations	

| Use Case ID	UC-03
Use Case Name	View and save fashionable retailer suggestions
Use Case Description	User saves a fashionable retailer suggestion for purchase later

Actors		Application User		
Pre-Conditions		User viewing clothes recommendations		
Post-Conditions		User saved new fashionable recommendations		
Frequency of Use		As frequent as user chooses		
Flow of events			**Actor Action**	**System Action**
	1		User views clothes recommendations	
	2		User Selects clothing item to view recommendations for	System displays retailer page for fashionable clothing item
	3		User decides to save item for purchase later by clicking "save for later"	System saves retailer page in database

Activity Diagram:

Data Storage: The application will use the Android internal storage in XML format. The storage requirements are not very large, in particular user preferences and saved clothing recommendations will needed to be stored, which we anticipate will be a few dozen items. The User Preferences class and Clothes Recommendation class will be retrieving and modifying data from data storage. If XML format ends up not being adequate we will use a SQL Lite database.

UI Mockups:

User Interaction 1: Viewing Recommendations
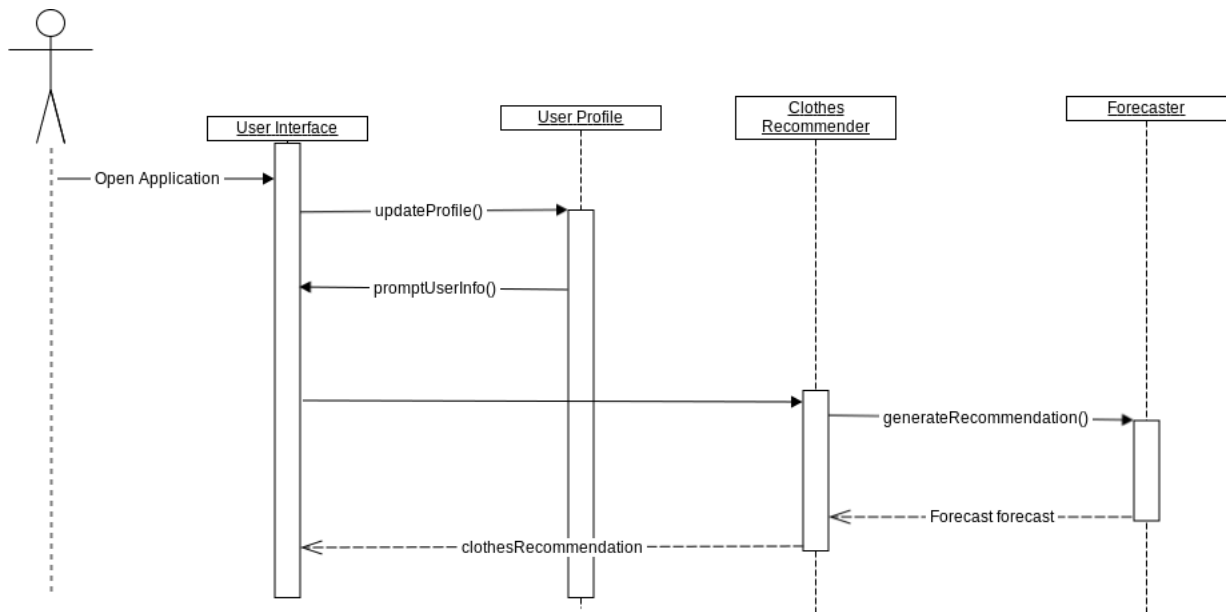
User Interaction 2: Setting Personal Preferences
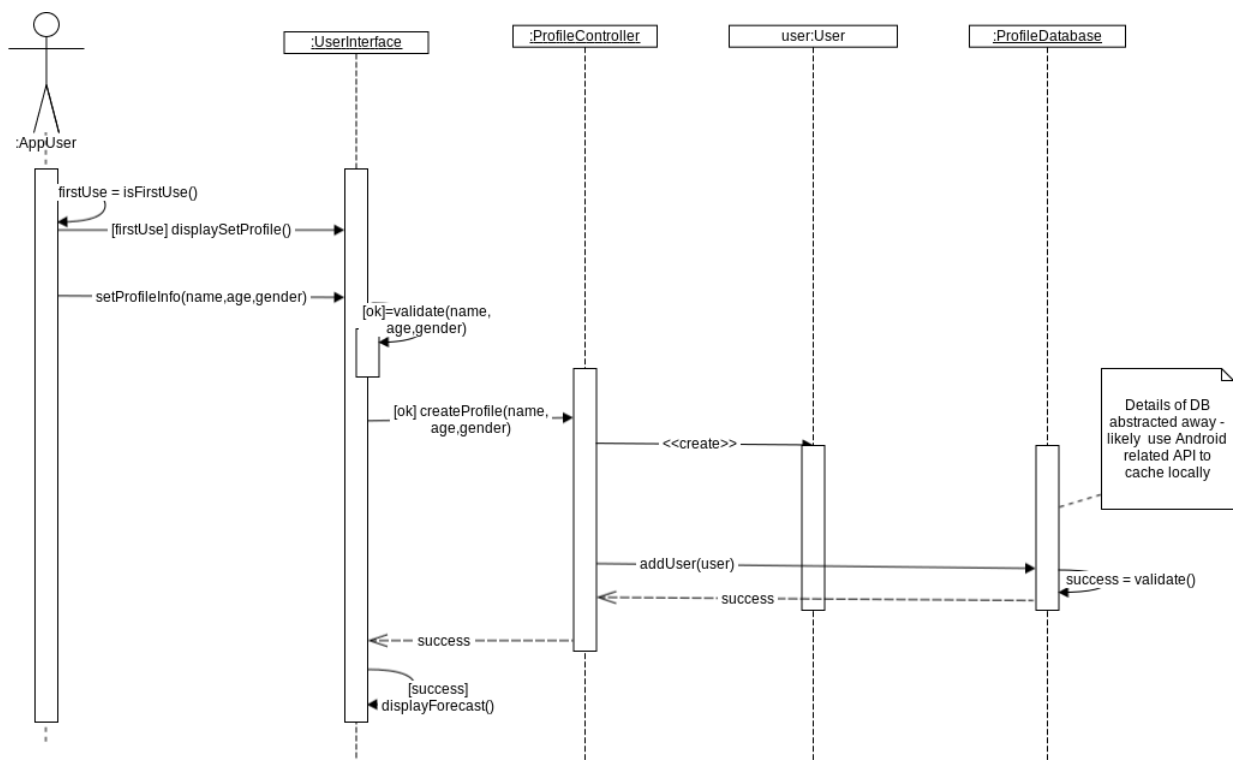
User Interaction 3: Setting Personal Preferences

The diagram shows a UML sequence diagram with the following elements:

- **:AppUser** (actor)
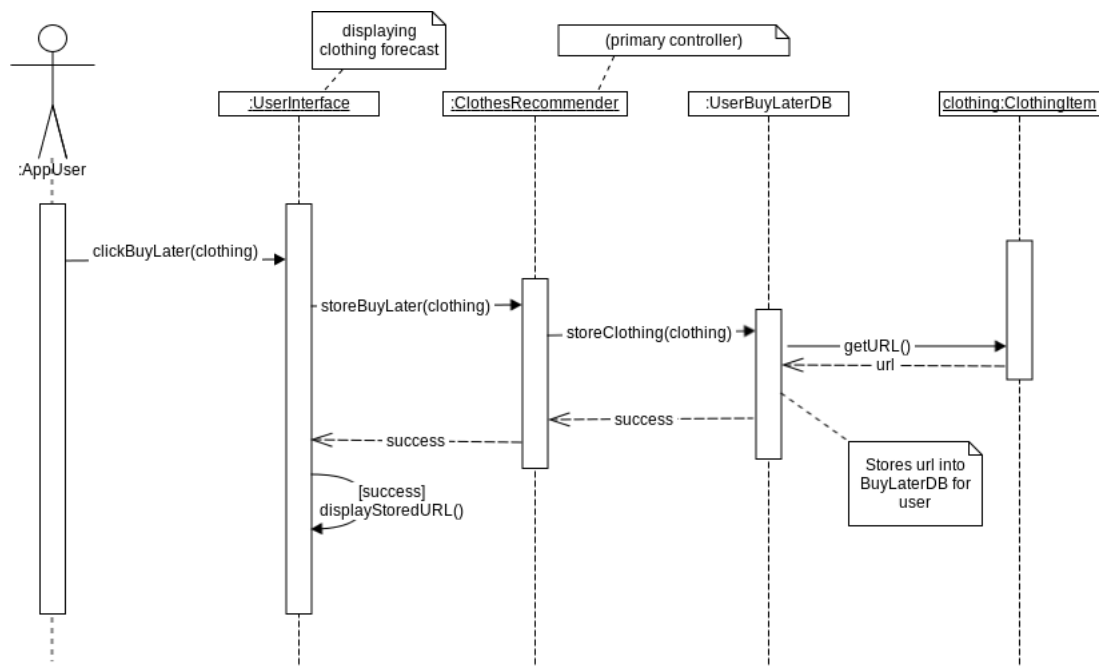- **:UserInterface** (with note "displaying clothing forecast")
- **:ClothesRecommender** (with note "(primary controller)")
- **:UserBuyLaterDB**
- **clothing:ClothingItem**

Messages:
- clickBuyLater(clothing) — from :AppUser to :UserInterface
- storeBuyLater(clothing) — from :UserInterface to :ClothesRecommender
- storeClothing(clothing) — from :ClothesRecommender to :UserBuyLaterDB
- getURL() — from :UserBuyLaterDB to clothing:ClothingItem
- url — (return) from clothing:ClothingItem to :UserBuyLaterDB
- success — (return) from :UserBuyLaterDB to :ClothesRecommender
- success — (return) from :ClothesRecommender to :UserInterface
- [success] displayStoredURL() — self-message on :UserInterface

Note: "Stores url into BuyLaterDB for user"

Class Diagram