Architectural Design Document
For
Wardrobe Assistant

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Chapter 1: Introduction

1.1 Purpose

Wardrobe Assistant (WA) is designed as an organizational tool for users to catalog and keep record of clothing articles. This document contains an in depth analysis of application and describes the functionality.

1.2 Scope

WA is a mobile application designed by our group for our final IT project at Lake Washington Institute of Technology. The application is designed to assist users in their daily choices of clothing and style.

1.3 List of Definitions and Abbreviations

1.3.1 Definitions
Wardrobe Assistant - Newly Developed mobile application

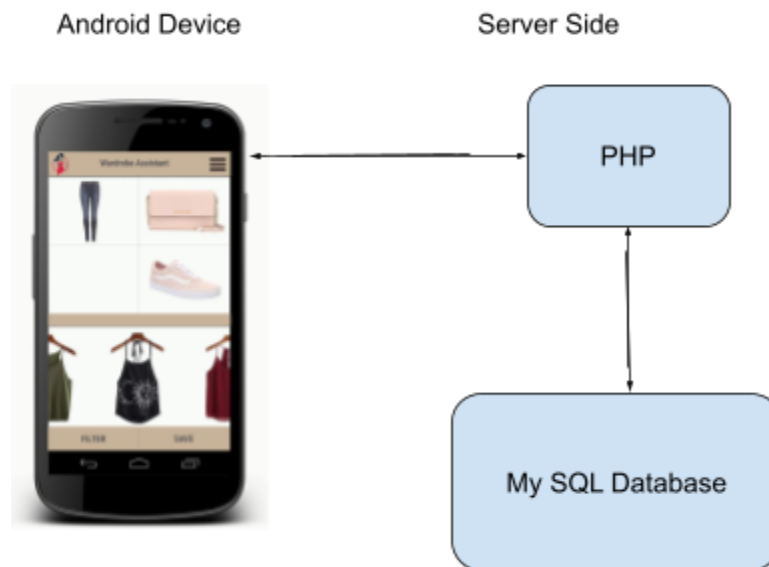1.3.2 Abbreviations
Wardrobe Assistant - WA

Chapter 2: System Overview
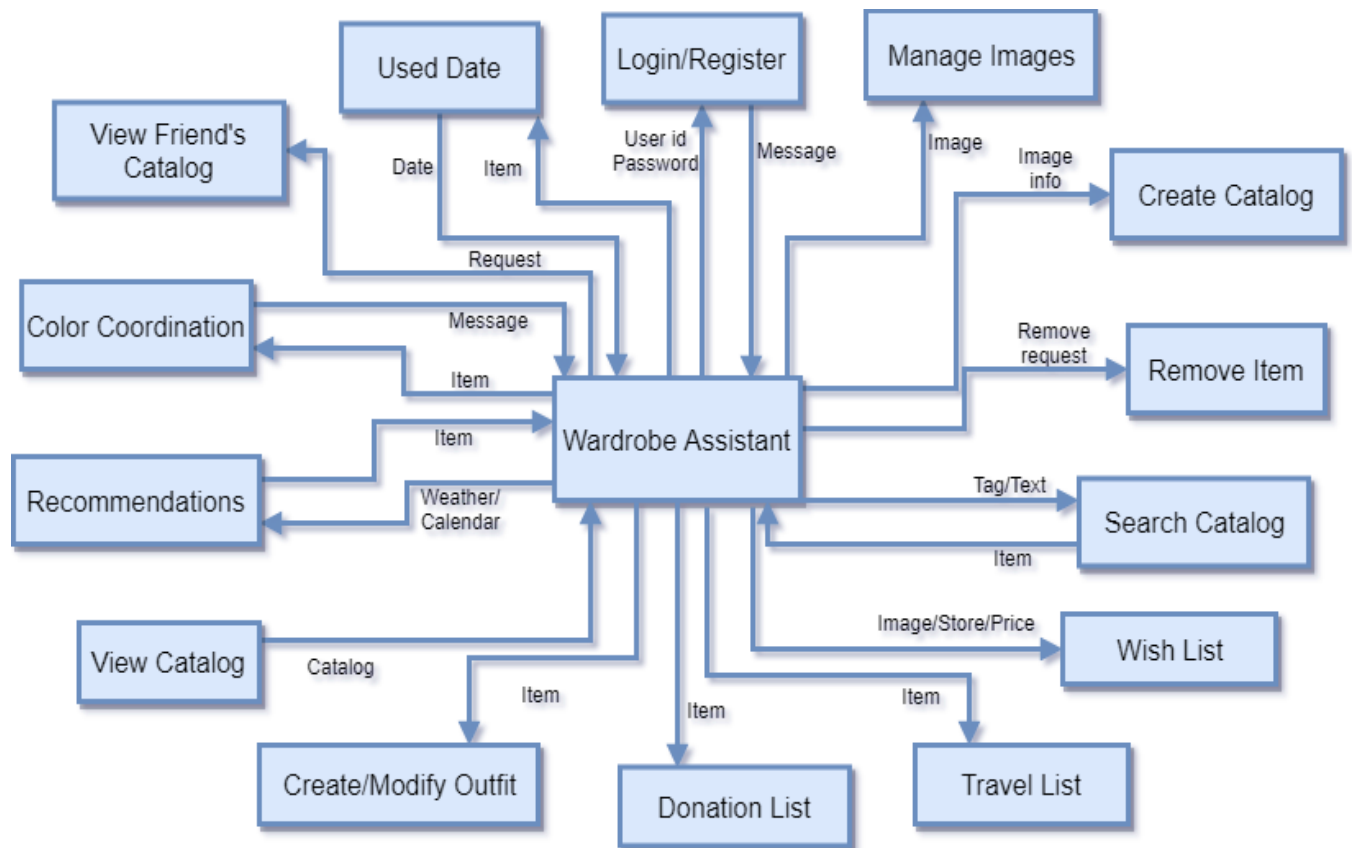
2.1 Basic Design and Context

      WA runs as a mobile application on the users mobile device. The files necessary to run WA are stored on the users device while all user given data is stored via external database. WA and the database remain in constant communication during the duration of runtime so long as internet connection persists. The purpose of keeping data stored externally is to maintain app runtime as data accumulates as it is added, which would standardly produce lag if it retained all the information internally. If the internet connection is lost, an alert will be thrown to the user that connection is weak or lost. Constant automatic saved states will take place in case of spontaneous application crash.

2.2 Technology Systems

      Android Studio was the development platform used for the application and external database is run through MySQL.

Chapter 3: Module Design

Chapter 4: Data Design

Data Structure
For Database

Login and Register: stores the username and password. During registration new user is added and while logging in the username and password is checked against the saved username and password; if they match then user can access his/her catalog.

Table Name: UserInfo

UserID (int)	UserName (varchar)	Password (varchar)
Id(Primary key)	Name	Encrypted password

Catalog: stores the every clothes information.
Table Name: Wardrobe

ItemID (int)	UserID (int)	ImagePath (varchar(url))	Color (varchar)	Type (varchar)	Season (varchar)	Row (int)	Column (int)	LastWorn Date (date)
id(Primary key)	Owner of the catalog (Foreign key)	Server path where dress photo is saved in server	Color of the dress	Category the dress belongs to(shirt/pant)	The season for which the Dress suitable	Location in physical wardrobe	Location in physical wardrobe	Last worn date

List: Stores the lists created by the user
Table Name: List

ListID (int)	UserID (int)	ListName (varchar)
Id(Primary key)	Who created the list(Foreign key)	List name (Travel list, Donation list)

List Items: Has the dress items in the list
Table Name: ListItems

ID (int)	ListID (int)	ItemID (int)	Status (varchar)
Id(Primary key)	Id(Foreign key)	Id(Foreign key)	Checked in or not?

Wish List: Has the store items in the list
Table Name: WishList

WishListID (int)	UserID (int)	ImagePath (URL)	StoreName (varchar)	Price (Decimal)
Id(Primary key)	Id(Foreign key)	Image saved in server		

Modified Outfits: Stores the modified outfits. Items from different category can be matched together and make one outfit.
Table Name: ModifiedItem

ModItemID	ItemID	ItemID	UserID	WearDate
Id(Primary key)	Dress 1(Foreign key)	Dress 2(Foreign key)	Who created or modified the item	When to wear

Chapter 5: Test Plan

Number	Action	Expected Result	Test Result
1	**General**		
1.1	**Open App**		
1.1.1	Launch the app	login screen is loaded	
2	**Take Photo/Log Item**		
2.1.1	1.Launch the app 2.Click on add button	Camera is open	
2.1.2	1.Launch the app 2.Click on add button 3. Take the photo 4. Open the image folder in the server	Image is saved in the server	
3	**Add Tags to Items**		
3.1.1	1.Launch the app 2.Click on add button. 3. Take the photo 4. Select the color of the dress from the list. 5. Select the type of the dress from the list 6. Select the season from the list 7. Select the location (row and column) of the dress 8. Click on save 9. Open database	Added item is present in catalog table in the server	

3.1.2	1.Launch the app 2.Click on add button. 3. Take the photo 4. Select the color of the dress from the list. 5. Select the type of the dress from the list 6. Select the season from the list 7. Select the location (row and column) of the dress 8. Click on save 9. Click Menu button 10. Click on Catalog option	Added item is present in the catalog view	
4	**Search Catalog**		
4.1.1	1.Launch the app 2.Click on menu 3.Click on color option 4. Select color 'red' from the list	all the red colored clothes are displayed	
4.1.2	1.Launch the app 2.Click on menu 3.Click on type option 4. Select the type 'shirt' from the list	all shirts are displayed	
4.1.3	1.Launch the app 2.Click on menu 3.Click on season button 4. Select the season 'Fall' from the list	all the clothes that are suitable to wear in fall season are displayed	

4.1.4	1.Launch the app 2.Click on search button 4. Type "Color:Red" on search box	All red color clothes are displayed	
4.1.5	1.Launch the app 2.Click on search button 4. Type "Type:Shirt" on search box	All the shirts are displayed	
4.1.5	1.Launch the app 2.Click on search button 4. Type "Season:Fall" on search box	All the clothes that are suitable to wear in fall are displayed	
5	**Remove Item**		
5.1.1	1. Launch app 2. Click on List 3. Select Item 4. Click "Delete" Option	Warning message "Are you sure want to remove?"	
5.1.2	1. Launch app 2. Click on List 3. Select Item 4. Click "Delete" Option 5. Hit "ok"	Item selected is deleted and disappears from list	
5.1.3	1. Launch app 2. Click on List 3. Select Item 4. Click "Delete" Option 5. Hit "Cancel"	Item selected for deletion is still present in the list	
6	**Create Outfit**		
6.1.1	1. Launch App	Items selected will be	

	2. Click on Menu 3. Click "Create Outfit" 4. Select Items for Outfit 5. Click "review" 6. Review outfit 7. Click "save outfit"	saved as an outfit into Outfit list	
7	**Recommendations**		
7.1.1	1. Launch App 2. Click on Menu 3. Click "Get Recommendations	Displays Item recommendations based on weather and events	
8	**Document Usage**		
8.1.1	1. Open App 2. Click on Menu 3. Select List 4. Click on "Last date worn"	Displays date that the item was last worn	
9	**Create Wish List**		
9.1.1	1. Launch the app 2. Click Menu 3. Click on Wish List option	Wish List view is loaded	
9.1.2	1. Launch the app 2. Click Menu 3. Click on Wish List option 4. Click on add button	Camera is open	
9.1.3	1. Launch the app 2. Click Menu 3. Click on Wish List option 4. Click on add button 5. Take photo 6. Enter store name 7. Enter price 8. Click save button	The dress is added to wish list	

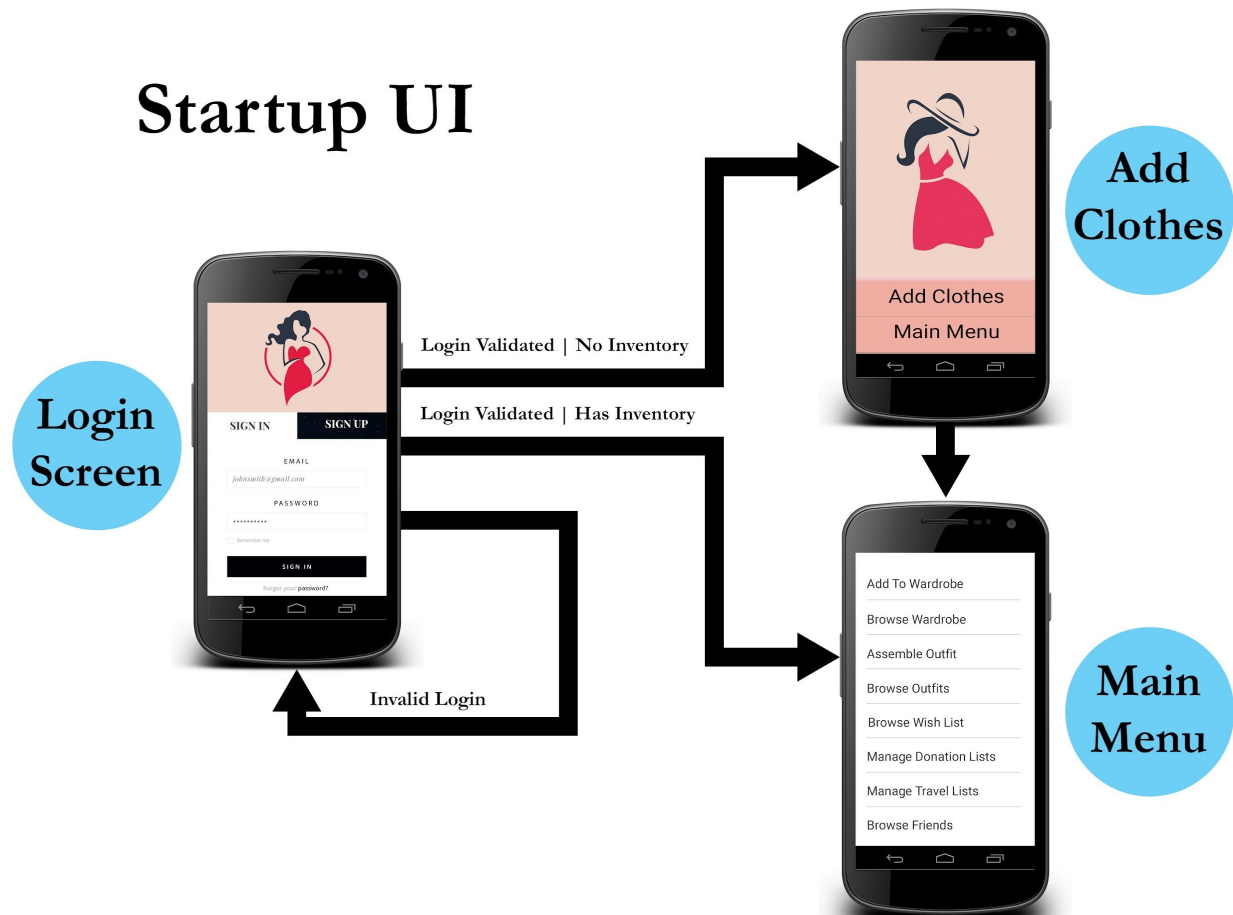| 10	Login to App		
10.1.1	1.Launch the app 2.Click on login button 2.Type username 'Tester' and password 'Tester1*'	app home screen is loaded	
10.1.2	1.Launch the app 2.Click on login button 3.Type username 'Tester121' and password 'Tester1*'	An error message 'Incorrect username and password' is displayed	
10.1.3	1.Launch the app 2.Click on Login button 3.Type username 'Tester' and password 'Tester111*'	An error message 'Incorrect username and password' is displayed	
11	Register to App		
11.1.1	1.Launch the app 2.Click on Register button	Register view is loaded	
11.1.2	1.Launch the app 2.Click on Register button 3.Enter username : Tester 4.Enter password: Tester1* 5. Click on Create Account button	'Registration Successful' message is displayed.	
11.1.3	1.Launch the app 2.Click on Register button 3.Enter username :	An error message 'User name is already present' Is displayed.	

	Tester 4.Enter password: Tester1* 5. Click on Create Account button		
11	**Create List**		
11.1.1	1.Launch the app 2.Click on Create List button 3. Type 'xxx' on list name box 4.Click save 5.Open database	List table has a row with ListName xxx	
11.1.2	1.Launch the app 2.Click on Create List button 3. Type 'xxx' on list name box 4.Click save 5.Click Menu button	Menu has an option with name'xxx'	
11.1.3	1.Launch the app 2.Click on Create List button 3. Type 'xxx' on list name box 4.Click save 5.Select 'xxx' option from the menu	xxx list view is loaded	
11.1.4	1.Launch the app 2.Click on Create List button 3. Type 'xxx' on list name box 4.Click save 5.Select Wish option from the menu 6. Click on add button 7.Select a image 8.Click on Add to	xxx list view is loaded	

	xxx list		
12	**Create Packing List**		
11.1.1	1. Launch the app 2. Click on image 3. Click on 'Add to Travel list' 4. Click on 'Menu' button 5. Select 'Travel List' option	Travel List has the dress added.	
11.2.1	1. Open App 2. Click Menu 3. Click Donations List	Displays Items in Travel List	
13	**Move Item to Donations List**		
13.1.1	1. Open App 2. Click Menu 3. Click List 4. Select items 5. Click "Move to Donations List"	Move selected items to Donations List	
13.1.2	1. Open App 2. Click Menu 3. Click Donations List 4. Select items 5. Click "Remove from Donations"	Moves selected items back to wardrobe	
13.1.3	1. Open App 2. Click Menu 3. Click Donations List	Display items in Donation List	
14	**Connect to Friend's Wardrobe**		
14.1.1	1. Open App 2. Click Menu 3. Select "Connect to Friend"	Friend's wardrobe will be displayed (if Username and Key was authentic)	

	4. Type in Username and Key		
14.1.2	1. Open App 2. Click Menu 3. Click "Reset key" 4. Click "yes" on warning message	Key resets for sharing wardrobe	
15	**Check Color Coordination**		
15.1	1. Open App 2. Click Menu 3. Click "create outfit" 4. Select Items that don't match to create outfit 5. Click "next" to review outfit	Error Message will appear because clothes don't match	

Initial Start Up

Startup UI

Login Screen

Login Validated | No Inventory

Login Validated | Has Inventory

Invalid Login

Add Clothes

Add Clothes

Main Menu

Main Menu

Add To Wardrobe

Browse Wardrobe

Assemble Outfit

Browse Outfits

Browse Wish List

Manage Donation Lists

Manage Travel Lists

Browse Friends

Modular Main Menu

Add To Wardrobe

Browse Wardrobe

Assemble Outfit

Browse Outfits

Browse Wish List

Manage Donation Lists

Manage Travel Lists

Browse Friends

Assemble Outfit

Add To Wardrobe

Browse Wardrobe

Wardrobe Assistant

FILTER   SAVE

Wardrobe Assistant

Wardrobe Assistant

Category

Filters