BOSS Now!

Android App

5324: SOFTWARE ENGINEERING

ANALYSIS, DESIGN, IMPLEMENTATION AND TESTING

ITERATION 3

GROUP – 3

Agenda

- Project Description
- Design Approach
- Requirements
- Traceability Matrix
- Increment Matrix
- Expanded Use Cases and UI Prototypes
- Sequence Diagrams
- Domain Class Diagram
- Summary

Project Description

- It is a platform where people can buy and sell products.
- Through the app, the seller will post the pictures and give a brief description of the product to be sold.
- The sellers will be able to raise a quotation base price upon which buyers will raise it to their affordable amounts of bids.
- After the bidding, once the product is sold, the product is marked as sold in the app.
- This app will provide the buyers, a facility to bid on the specific products that they are interested to purchase.
- There will be a system admin who will function to set up the database.

Overall Design Approach

- BOSS Now is an App designing project and therefore establishes a highly structured design process that will allow for achieving our ambitious mission.
- We identified the required functionalities of our App and also the capabilities of our Team members. So, we assigned each team member specific Use Cases.
- Our intention of following a “clean-slate” design approach can be recognized by the formulation of a clear *vision* and the definition of *goals* for our design. We then follow suit by clearly outlining the *principles* for our design from which we derive *design considerations and patterns* to be seen throughout the overall system.

Overall Design Approach

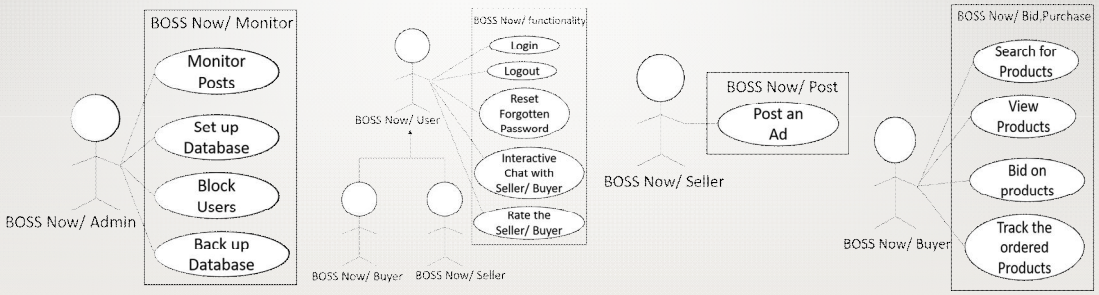
- The experiences gained from the validation process will be used to improve the design and implementation in an *iterative* fashion, leading to a final solution which embodies the best combination of refinement, reliability, security, and performance.

Requirements

- Login and Logout
- Register and Reset Password
- Block the user
- Post an Ad
- View and Sort products
- Bid on products
- Consistent look throughout
- App shall maintain user session data

Use Case Diagram

- It is a UML behavioral diagram that depicts the Use cases, Actors, subsystem boundary, Inheritance relationships between actors, Relationships between use cases.



Requirements Use-Case Traceability Matrix

	Priority Weight	UC 1	UC 2	UC 3	UC 4	UC 5	UC 6	UC 7	UC 8	UC 9	UC 10	UC 11	UC 12	UC 13	UC 14
R1	4		X												
R2	4										X				
R3	3												X		
R4	3	X													
R5	2			X											
R6	4									X					
R7	3					X									
R8	1						X								
R9	3													X	
R10	4							X							
R11	2								X						
R12	4											X			
R13	1														X
R14	1				X										
	Score	3	4	2	1	3	1	4	2	4	4	4	3	3	1

Increment Matrix

Use Case	Priority	Effort (person-week)	Depends on	Iteration 1 5 Weeks (09/6 -10/06/2017)	Iteration 2 -4 Weeks (10/07-11/01/2017)	Iteration 3 – 4 Weeks (11/02 -11/29/2017)
UC 1	3	5	UC9		5	-
UC 2	4	9	None	9	-	-
UC 3	2	3	UC10		3	-
UC 4	1	2	UC2	2	-	-
UC 5	3	3	UC9	-	3	-
UC 6	1	2	UC9	-	-	2
UC 7	4	8	UC10	-	4	4
UC 8	2	3	None	-	-	3
UC 9	4	9	None	-	5	4
UC 10	4	8	None	8	-	-
UC 11	4	6	UC10	6	-	-
UC 12	3	5	UC10	5	-	-
UC 13	3	5	UC5	-	-	5
UC 14	1	2	UC13	-	-	2
Total Effort		70		30	20	20

Expanded Use-Cases

- Login and Logout
- Block the user
- Post an Ad
- View and Sort products
- Bid on products

Expanded Use-Cases

See Figure 6

UC5: VIEW PRODUCTS	
Actor: Buyer	System: App
	0. The app displays the main page.
1. TCUBW buyer clicks on Search text box and enters product to be searched.	*2. App displays the list of products.
3. TUCEW buyer sees the searched products.	

See Figure 9

UC13: BID ON PRODUCTS	
Pre-Condition: Buyer selects product to be Purchased.	
Actor: Buyer	System: App
	0. App displays Product page.
1. TUCBW buyer increments/ decrements the price.	2. App displays price by the bidder.
3. TUCEW buyer sees the bid on the product.	
Post-Condition: The Buyer successfully places the Bid.	

Expanded Use-Cases

See Figure 10

UC9: POST AN AD	
Actor: Seller	System: App
	0. App displays Post Ad page.
1. TUCBW seller clicks on Post an Ad.	2. App displays new ad page.
3. TUCCW seller entering the product details.	4. App displays confirmation dialog box.
5. TUCEW seller clicks OK and posts an ad.	

UC3: BLOCK USERS	
Pre-Condition: Admin clicks on POSTS page.	
Actor: Admin	System: App
	0. System displays POST page.
1. TUCBW admin clicks on the Buyer/ Seller ID with reports more than 10.	*2. System displays the profile page.
3. TUCEW admin clicks on Block user.	
Post-Condition: User is blocked.	

Expanded Use-Cases

See Figure 1

UC10: LOGIN	
Actor: User	System: App
	0. App displays the homepage.
1. TUCBW User clicks on Login.	2. App displays Login page.
3. User enters Username and Password.	4. App displays Welcome page.
5. TUCEW user sees Welcome page.	

See Figure 2

UC11: LOGOUT	
Actor: User	System: App
	0. App displays any screen.
1. TUCBW user clicks on Logout.	2. App displays Confirmation dialog box.
3. User clicks on OK.	4. App displays Homepage.
5. TUCEW user sees the Homepage.	

UI Prototypes

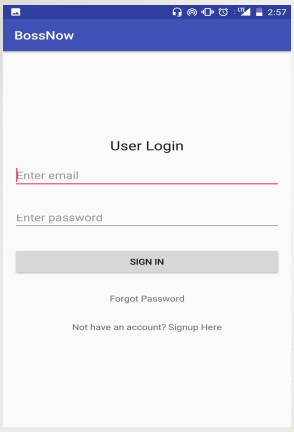


Figure 1

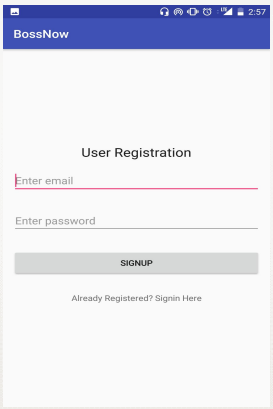


Figure 2

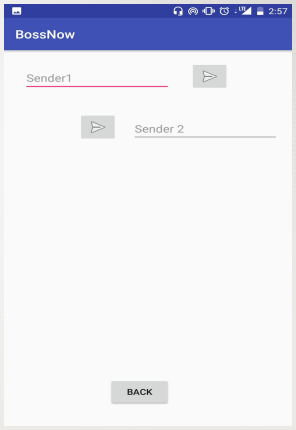


Figure 3

UI Prototypes

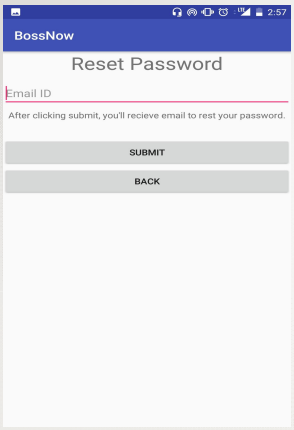


Figure 4

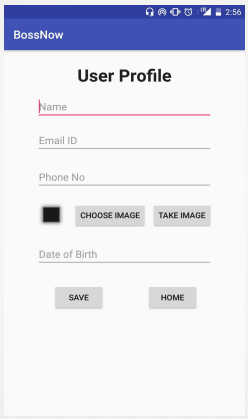


Figure 5

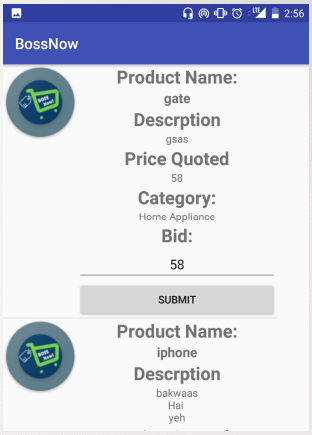
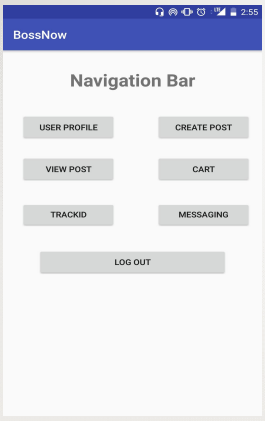


Figure 6

UI Prototypes



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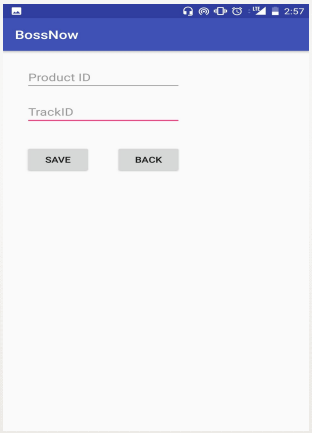

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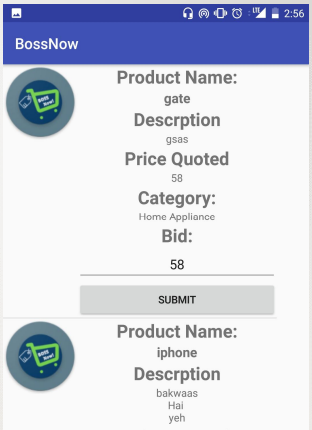


Figure 9

UI Prototypes

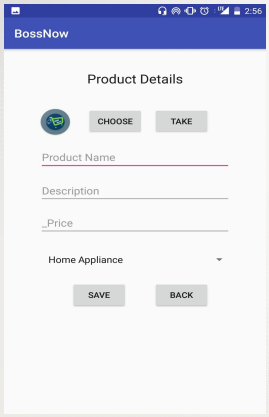
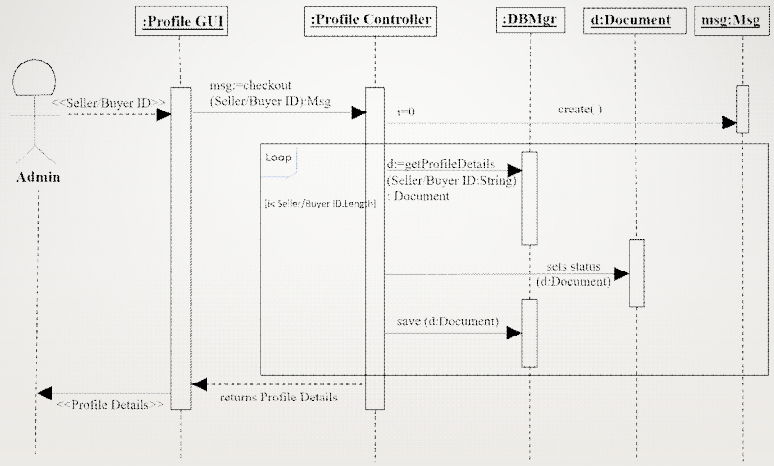


Figure 10

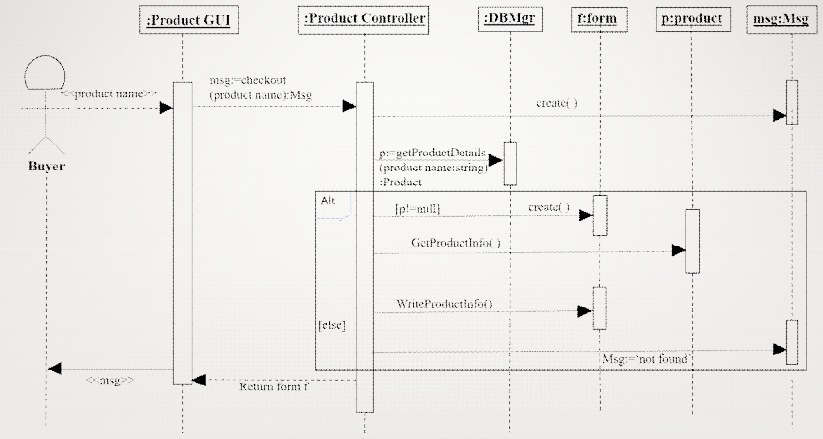
Sequence Diagrams

UC3: Block User



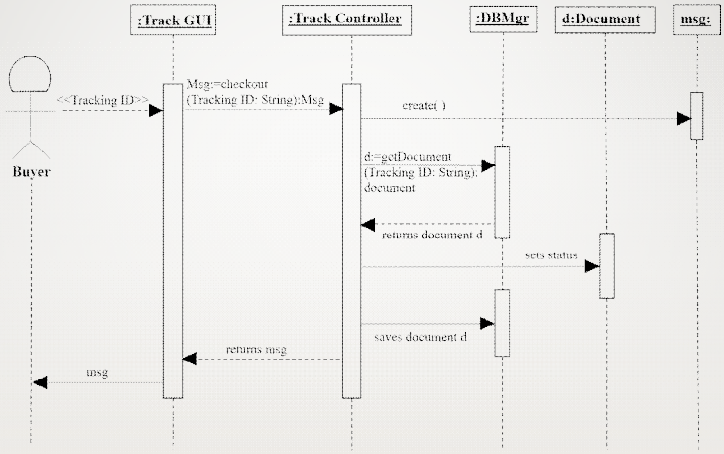
Sequence Diagrams

UC5: View product

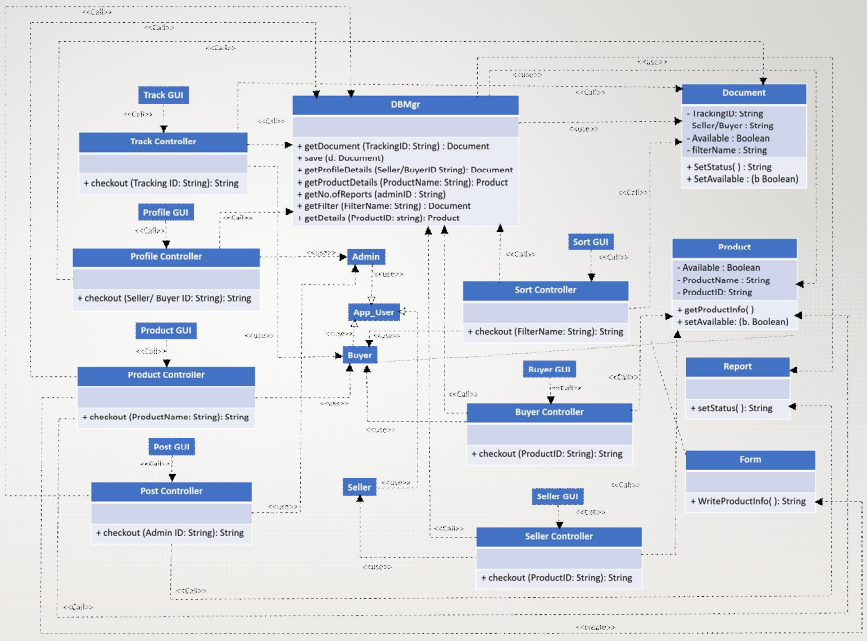


Sequence Diagrams

UC15: Bid on products



Design Class Diagram



Summary

- BOSS Now is a platform where people can buy and sell products.
- The sellers will be able to raise a quotation base price upon which buyers will raise it to their affordable amounts of bids.
- This app will provide the buyers, a facility to bid on the specific products that they are interested to purchase.
- The experiences gained from the validation process will be used to improve the design and implementation in an *iterative* fashion, leading to a final solution which embodies the best combination of refinement, reliability, security, and performance.