Assignment On

Software Metrics Lab

Couse Code: SE 3204

Submitted To

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REQUIREMENTS ANALYSIS AND SPECIFICATION SIZE

OF "পল্লীহাট"

SRS requirements and specification documents include text, graphics, and unique mathematical symbols and pictures. The nature of the presentation depends on the particular style, method, or notation used. These documents may include both text and graphics and illustrations.

Measurement	Value
SRS size	2,930,111 bytes
Number of pages	105

Measurement type: Functional and nonfunctional requirement

Total functional requirement	13
Total nonfunctional requirement	20

Measurement type: Stakeholders

Types of stakeholders	Total
System owner	4
Entrepreneur	
Customer	
Employee	

Measurement type: Collection of Requirement

Number of workshops	4
Number of Questionnaire	2

Measurement type: Number of figures and diagrams

Number of UML diagram	0
Use case diagram	2
Number of class diagram	0
Entity relationship diagram (ERD)	0
Number of alloy model	0
Number of data flow diagram	0
Number of Swimlane diagram	0
System Context diagram	0
Number of figures	41
Number of tables	45

Measurement type: Use case diagram

Name of the metrics	values
Use case diagram	2
Number of use cases	41
Number of actors	3
Number of use case per actor	13.67
Number of relations among use cases	25

Measurement type: Use case description

Title	Number of actors related to use case description
Registration	2
Login	3
Edit profile	1

Title	Number of actors related to use case description
Logout	3
Activate Account	2
Change password	1
Search Product	1
Select Rating	1
Post Review	1
Place order	2
Manage Shopping Cart	1
Add to Cart	1
Update Cart	1
Remove Items from Cart	1
View products into cart	1
Manage Category	1
Add Category	1
Update Category	1
Remove Category	1
View Category	2
Manage Product	1
Add Product	1
Update Product Details	1
Remove Product	2
View Product Details	2
Manage Invoice	1

Title	Number of actors related to use case description
Generate Invoice	1
Update Invoice	1
Add Entrepreneur	1
Manage Entrepreneur	1
Update Entrepreneur Details	1
Remove Entrepreneur	1
View Entrepreneur Details	1
Remove Customer	1
View Customer Details	1
Manage Feedback	1
View Feedback	1
View Order List	2
Receive Product from Entrepreneur	1
Change Order Status	2
Forgot Password	1

Measurement type: Activity diagram

Total number of activity diagram	41
Total number of steps	169
Total number of branching actions	81
Branching action per activity diagram	1.98
Average Steps per activity diagram	4.1219

Measurement type: Activity Diagram

Title	Number of steps	Number of branching actions
Registration	6	4
Login	4	2
Edit Profile	5	3
Logout	3	0
Activate Account	4	3
Change Password	5	0
Search Product	4	2
Select Rating	4	2
Post Review	5	2
Place Order	7	4
Manage Shopping Cart	3	6
Add to Cart	2	0
Update Cart	5	2
Remove Items from cart	5	2
View Products into cart	3	2
Manage Category	3	6
Add Category	5	2
Update Category	6	3
Remove Category	7	2
View Category	2	2
Manage Product	3	6
Add Product	7	2
Update Product Details	6	2
Remove Product	6	2

Title	Number of steps	Number of branching actions
View Product Details	2	2
Manage Invoice	2	3
Generate Invoice	4	0
Update Invoice	4	1
Manage Entrepreneur	3	6
Add Entrepreneur	3	2
Update Entrepreneur Details	3	2
Remove Entrepreneur	6	2
View Entrepreneur Details	2	2
Remove Customer	4	2
View Customer Details	2	2
Manage Feedback	7	2
View Feedback	2	2
View Order List	3	2
Receive Product from Entrepreneur	4	0
Change Order Status	2	0
Forgot Password	6	2

Function Point

FP measures the functionality from the user's point of view like what the user receives from the software and what the user requests from the software. Function points measure the size of an application system based on the functional view of the system. To do this, we determine from some representation of the software the number of "items" of the following types:

Function point complexity weight:

Item	Simple	Average	Complex
External Inputs	4	5	7
External Outputs	3	5	8
Internal files	2	4	7
External files	3	5	6
External Inquiries	4	5	7

Item	Name	Quantity	Complexity	Weight
External Input	System owner information Customer Information Entrepreneur Information Category Information Product Information File Information Order request Review send Product complaint Message send Rating Send Cart information	11	Average Simple Average Simple Complex Complex Average Simple Average Simple Simple Average	5 4 5 4 7 7 5 4 5 4 4 5
External Output	Product availability Category list Invoice pdf generation All Feedback list Product Recommendation All message list Order Confirmation	7	Complex Simple Complex Average Complex Simple Complex	8 3 8 5 8 3 8
Internal files	Internal Database	1	Complex	7
External files	Image Pdf generation library	2	Average Complex	5 6
External Inquiries	Order confirmation message Cart add confirmation Inadequate product error message Duplicate product into the cart error message Duplicate category error message Payment sent confirmation message	6	Complex Average Average Simple Simple Complex	7 5 5 4 4 7

So Unadjusted Function point=152

Component of technical complexity factor:

No.	Rating
F1	4
F2	4
F3	3
F4	5
F5	5
F6	3
F7	5
F8	3
F9	4
F10	5
F11	4
F12	4
F13	0
F14	2

Total:47

Technical Complexity Factor (TCF)=0.65+0.01*47

$$=1.12$$

UFP= unadjusted function point and

TCF=Technical complexity factor

Function Point (FP)=UFP*TCF

$$=152*1.12$$

$$=170.24$$