

A Project report on "eBabyCare"

Submitted by

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This project has been submitted in fulfillment of the requirements for the degree of Bachelor of Science in Software Engineering

APPROVAL OF PROJECT

APPROVAL

This project titled on "eBabyCare", submitted by Jannatul Ferdous Shova, ID: 182-35-2568 to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Software Engineering and approval as to its style and contents.

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DECLARATION

I hereby declare that I have done this project under the supervision of Md. Shohel Arman, Senior Lecturer, Department of Software Engineering, Daffodil International University. I also declare that this project or any part of this is unique and has not been submitted elsewhere for the award of any degree.

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ACKNOWLEDGEMENT

I would like to express my heartfelt gratitude to the Almighty Allah who offered upon my family and me kind care throughout this journey until the fulfillment of this project.

Also I would like to thank my honorable supervisor Md. Shohel Arman, Senior Lecturer, Department of Software Engineering, Daffodil International University for their proper guidance, help, support and cooperation. Without whom this project work would not be complete.

I would like to thank my entire course mate in Daffodil International University, who took part in this discussion while completing the course work. Finally, I am so grateful to my parents that I was consistently supported by them. They always prioritize my opinion and inspire me also.

ABSTRACT

In today's world, raising a child is a great issue for working parents. In most cases finding a nanny or trustable a helping hand is extremely difficult to find. On the other hand, there are still no part-time job sectors for our high-school kids and college kids as well(14 or above). Most of them are mature enough to take care of a toddler or young kids.

My project "eBabyCare" is going to make a bridge between these two. It will help these parents to find a trustable person for a certain period of time and help those kids to earn some pocket money by taking care of a baby.

Chapter 1

Introduction

Our traditional economic system does not allow a high school kid to earn the pocket money he needs. Thus they are not able to know about money management until college or in some cases after varsity. eBabyCare could be a platform to solve this problem for them. make an earning source.

On the contrary, raising a child is a great issue for working parents. In most cases finding a nanny or trustworthy helping hand is extremely difficult to find. On the other hand, there are still no part-time job sectors for our high-school kids and college kids as well (14 or above). Most of them are mature enough to take care of a toddler or young kids.

"eBabyCare" is going to make a bridge between these two. It will help these parents to find a trustable person for a certain period of time and help those kids to earn some pocket money by taking care of a baby.

1.2 Project Purpose

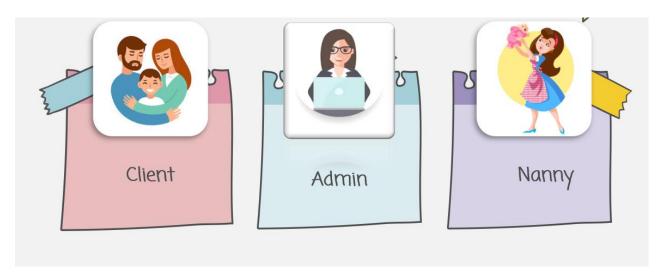
The main purpose of this project is to introduce a platform to the teenage students as well as the working parents. This platform will create a earning opportunity for the teens and also help the working parents balance between parenting their children and not compromising their working life.

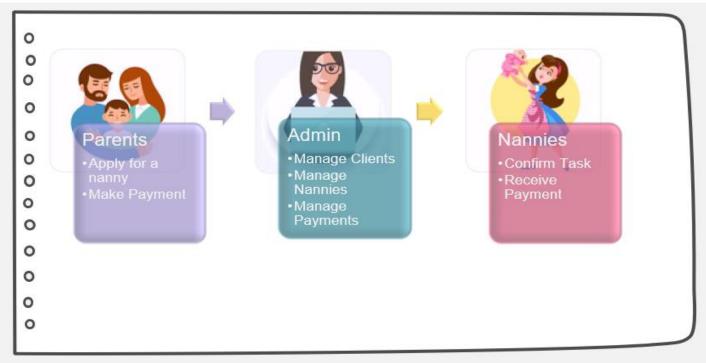
- Providing an earning platform for students.
- Providing an efficient way to take care of children

1.3 Stakeholders

There will be three types of stakeholders in our project.

- 1. Admin who will control the overall workflow, bookings and appointing nanny.
- 2. Parents/Client create account and book nanny/babysitter
- 3. Babysitter/nanny will apply and babysit via this platform.





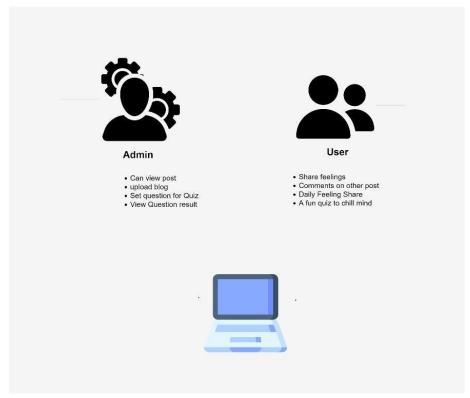


Figure 1.1: Proposed System Model

1.5 Modules of This Systems

- Login: For users' authentication
- Registration: For Managing all users in the system
- Profile Module: for all verified users
- Booking: book Babysitter.
- View Module: For viewed all activities
- Upload Module: For users to upload post & admin to upload blog
- Edit Module: For admin to edit uploaded blog
- Delete Module: For Admin to delete Unnecessary things

CHAPTER 2 REQUIREMENT ENGINEERING

Functional requirement defines a function of a system which describes the services of the system that must be offered. Functional requirement describes the main component of the system. It defines everything that a software or a system must do, the software's functions and features. It will describe particular behavior of function of the system when certain conditions are met. It is important to make them clear for the stakeholders.

Here is the functional requirements of my project:

2.1.1 Login/Logout

FR 1	Login / Logout
Description	Traveler must be log in their account when they want to book any
	service, and vendor must be log in when they want to post or upload
	something or view any details.
Stakeholders	Admin, User

2.1.2 Registration

FR 2	Registration
Description	User must be register to log in to the system
Stakeholders	Admin, Parent, babysitter

2.1.3 Profile

FR 3	Profile
Description	Every user will have a profile. Their all their personal information will be save.
Stakeholders	Parent, babysitter

FR 4	Share post
Description	Users can share their daily feelings. Others user can comment and suggest solutions and friendly solutions.
G. 1 1 11	
Stakeholders	Parent, babysitter

2.1.5 Booking a Babysitter

FR 5	Book an appointment
Description	Parents can request an appointment of a babysitter and the babysitter can confirm the appointment. the whole process will be monitored by the admin.
Stakeholders	Parent, admin, babysitter

2.1.6 Blog

FR 6	Blog
Description	Admin can upload edit & delete audio, video & therapy based video to resolve the mind of stressed people. User can view the blog section
Stakeholders	Admin, Parent, babysitter

2.1.7 Chat Bot

FR 7	Chat Bot
Description	There will be an automated chatting way find the own way to refresh stressed people mind.
Stakeholders	Admin, Parent, babysitter

2.1.9 Dashboard

FR 9	Dashboard
Description	There will be an admin dashboard where all user updates will be available. And all blog and quiz update will be available
Stakeholders	Admin

2.2 Non-Functional Requirement

Non-functional requirements define the quality and the performance attribute of the system. Non-functional requirement presents a standard set which is used to judge the specific operation of the system.

Here is the non-functional requirement of my project:

2.2.1 Performance

NFR 1	Performance
Description	When admin search to perform a particular job then the outcomes must be appearing.
Stakeholders	Admin

NFR 2	Capacity
Description	System will be able to record up to 5000 data and the information of the system will be stored in database.
Stakeholders	Admin

2.2.3 Reliability

NFR 3	Reliability		
Description	System should be able to fulfil all of its functional requirements.		
	The system update is very necessary and regularly.		
Stakeholders	Admin		

2.2.4 Security

NFR 4	Security
Description	All data needs to protected from outside attack. Encryption
	protection is one great solution. Authentication of every request should be ensured.
Stakeholders	Admin

2.2.5 Maintainability

NFR 5	Maintainability		
Description	Admin can easily maintain the whole system, all the profile and can update a specific area's information		
Stakeholders	Admin		

2.2.6 Availability

NFR 6	Availability		
Description	The system should be available 24 hours of a day (24x7)		
Stakeholders	Admin		

CHAPTER 3 SYSTEM ANALYSIS, DESIGN & SPECIFICATION

Development:

As this is a progressive project, I choose an agile model. I have to develop my system with a flexible mind. So, the system can be updated without changing anything in the other portion of my system. To ensure the efficiency this system is tested in every step of development. For a good performance of the system, I need to test every part of the project. So, I choose agile model. This model helps me to test the system in part of development, find bugs, issue, and resolve them. Agile model helps to create system which can be updated easily, frequent testing, standard quality of product, and development in a short time.



Figure 3.1: Agile Model

Use Case Diagram

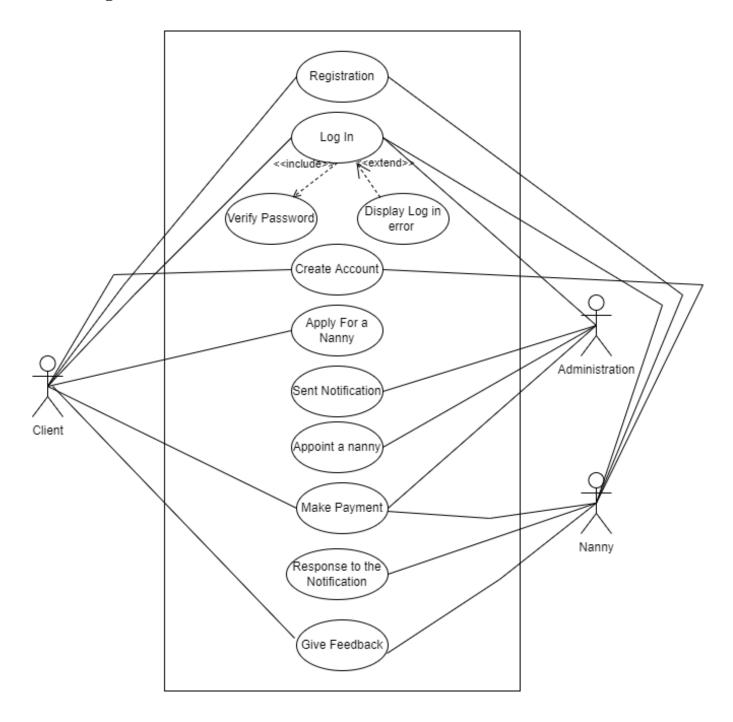


Figure 3.2: Use Case Diagram

Use Case Description

3.3.1 **Login**

Use Case ID	UC-01			
Use Case Name	Login / Sign ii	n		
Goal	Login to the sy	ystem		
Preconditions	User must be i	register with their email and correct passwo	ord	
Primary Actor	Admin, User			
Secondary Actor				
Trigger	Button			
Description / Main	Step	Step Action		
success scenario	1	To enter into the system		
	2	To access the required feature		
Post Condition	User can login any time			
Alternative Flow	Sign up			

3.3.2 Registration

Use Case ID	UC-02			
Use Case Name	Sign up			
Goal	To create a nev	w user profile		
Preconditions	User must hav	e an email account		
Primary Actor Secondary Actor	Admin, user			
Trigger	Button	Button		
Description / Main success scenario	Step	Action		
Success Scenario	1	To enter into the system		
	2	To create a new user profile		
Post Condition	User can login any time			
Alternative Flow	N/A			

Use Case ID	UC-03			
Use Case Name	Profile			
Goal	Access into us	ser profile		
Preconditions	User must log	in to the system		
Primary Actor	Admin, User			
Secondary Actor				
Trigger	Button	Button		
Description / Main	Step	Step Action		
success scenario	1	To login		
	2	To access user profile		
Post Condition	User can view and edit profile			
Alternative Flow	N/A			

3.3.4 Share Post

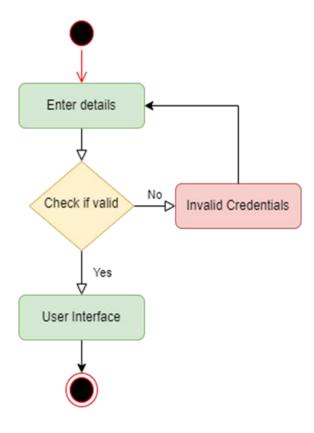
Use Case ID	UC-04			
Use Case Name	Share Post	Share Post		
Goal	To share the	ir post		
Preconditions	User must lo	ogin to the system		
Primary Actor Secondary Actor	user			
Trigger	Button			
Description / Main success scenario		Action		
success section to	1	To login		
	2	Write post to timeline		
	3	Save and share the post		
Post Condition	User can edit and delete their post			
Alternative Flow	N/A			

Use Case ID	UC-05			
Use Case Name	Booking			
Goal	To book a bab	pysitter		
Preconditions	User have to g	go to their profile		
Primary Actor	Parent, admin	, babysitter		
Secondary Actor				
Trigger	Button			
Description / Main	Step	Action		
success scenario	1	C Cl	4	
	1	Go profile		
	2	pick a date		
	3 Send booking request			
	4	4 Accept booking request		
	5	Confirm Booking		
Post Condition	User can view and Update their activities			
Alternative Flow	N/A			

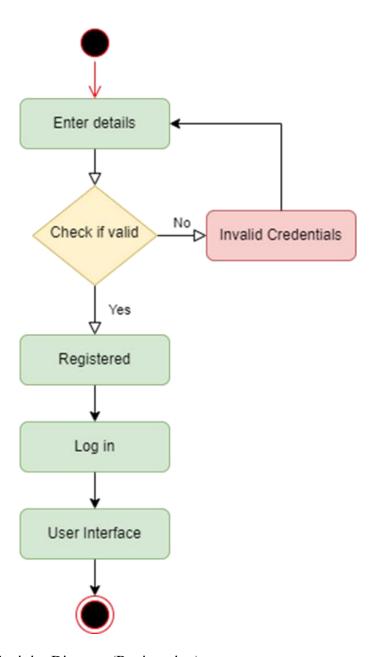
3.3.6 Chat Bot

Use Case ID	UC-06			
Use Case Name	Chat Bot			
Goal	Communicatio	on		
Preconditions	User must logi	n to the system		
Primary Actor Secondary Actor	User			
Trigger	Button	Button		
Description / Main success scenario	Step	Action		
success section to	1	To login		
	2	Chat though AI		
Post Condition	User can view their conversations			
Alternative Flow	N/A			

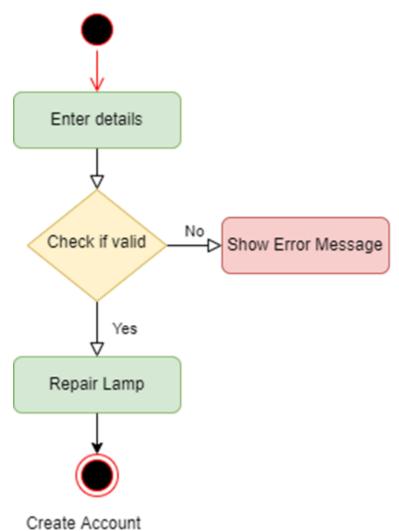
Use Case ID	UC-07			
Use Case Name	Blog	Blog		
Goal	Admin to uplo	ad, edit Audio & video. User to view.		
Preconditions	User & Admir	n must login to the system		
Primary Actor	Admin User			
Secondary Actor				
Trigger	Button			
Description / Main success scenario	Step	Action		
success seenario	1	Go to blog		
	2	Upload/edit blog		
	3	Save & update		
Post Condition	User can view and admin can edit			
Alternative Flow	N/A			



Activity Diagram (Login)

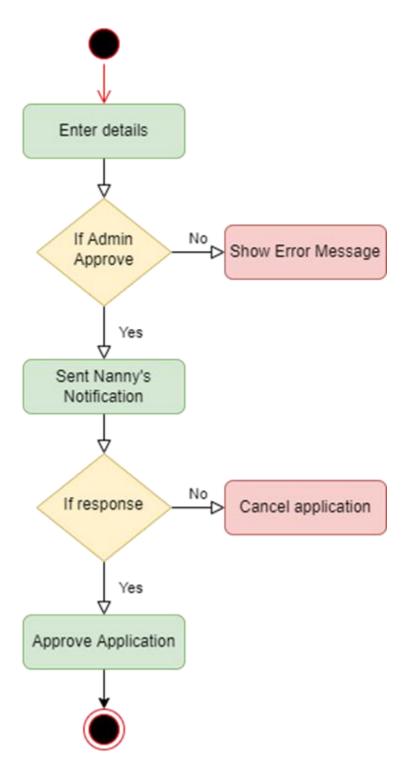


Activity Diagram (Registration)

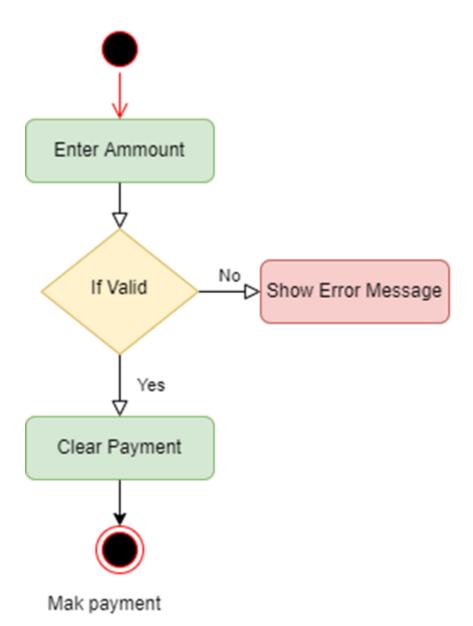


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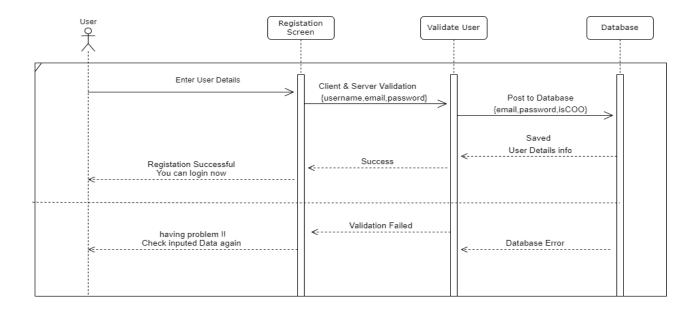
Activity Diagram (Create Account)



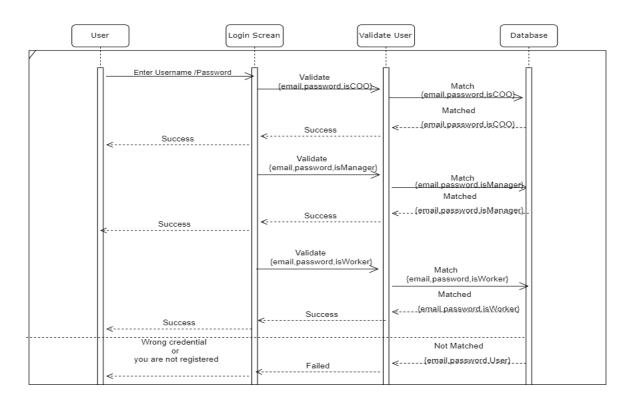
Apply for a nanny



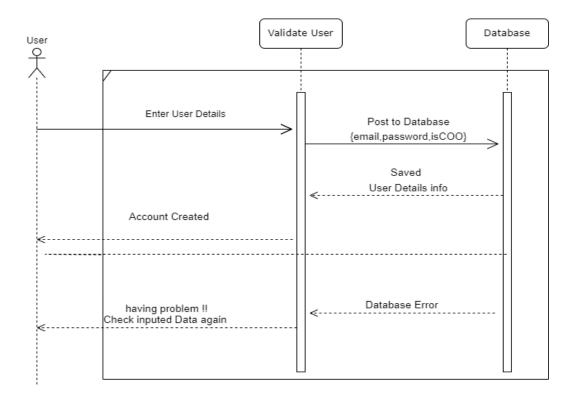
3.5.1 Registration



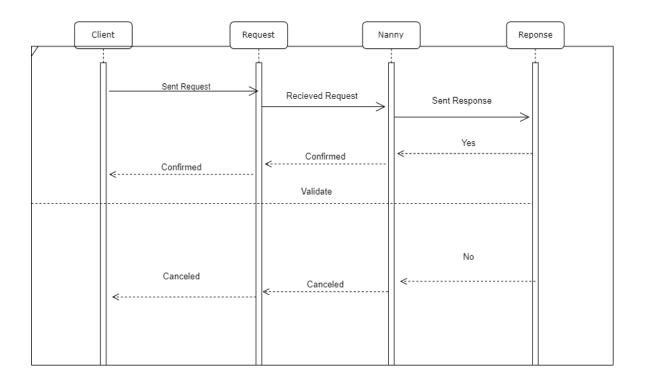
3.5.2 Log in



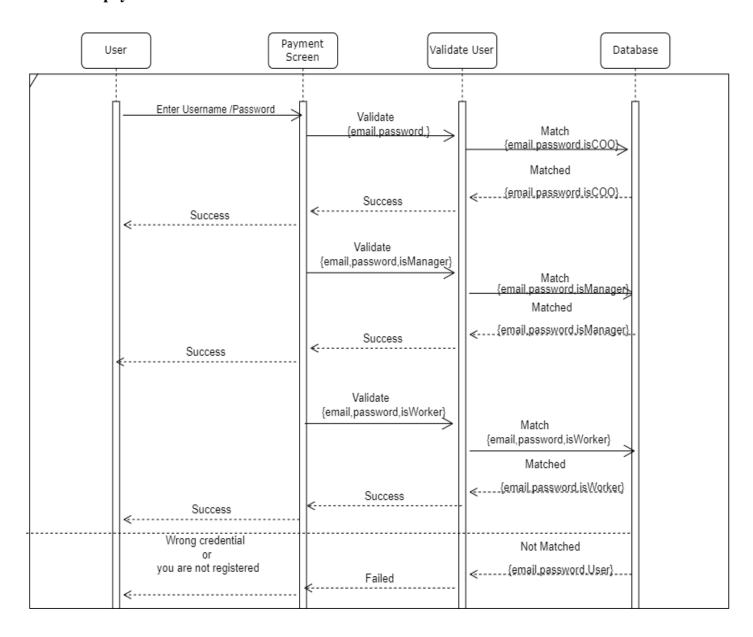
3.5.3 Create Profile

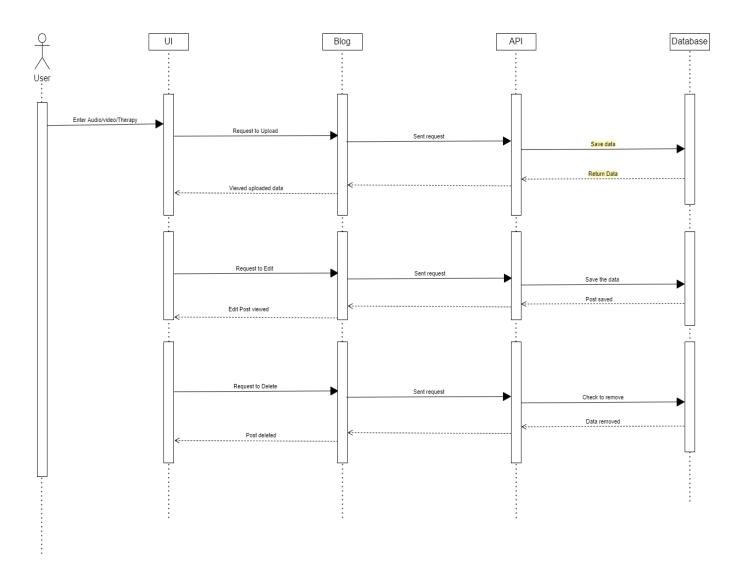


3.5.4 Find a Nanny

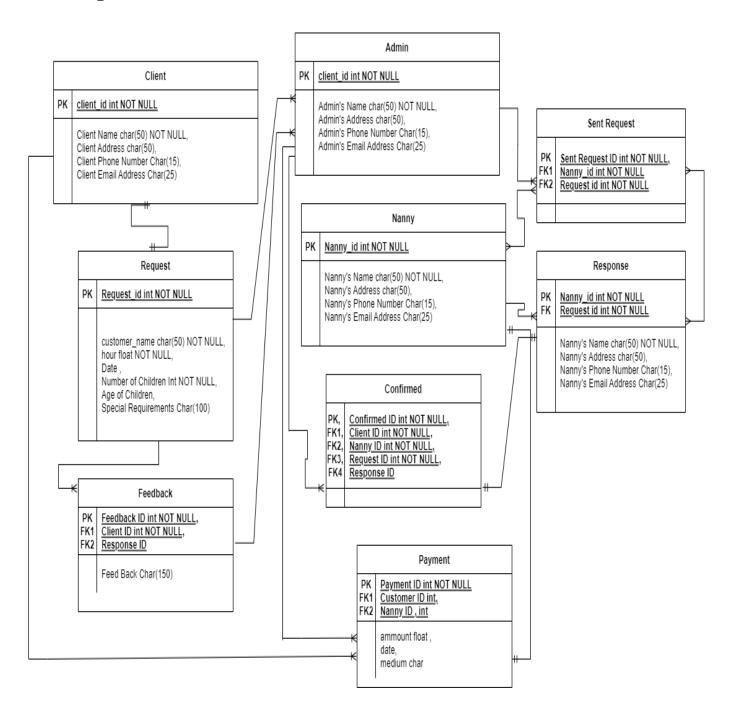


3.5.4 make payment





ERD Diagram



CHAPTER 4 SYSTEM TESTING

Web applications need to be updated from time to time. Feature testing is a way of adding functionality or modifying to be matched by new technology. After the feature testing every application becomes more reliable, secure and efficient.

4.1.1 Tested Feature

Feature	Priority	Description
Login	1	The user must be authenticating by login
Logout	2	The session must be finished by log out
Registration	1	User info must be saved
View Profile	2	User can see their profile info
Dashboard	1	Admin can manage all activities from dashboard
Post Sharing	1	User can share their feelings
Book Babysitter	1	User can check their daily mood
Blog	2	Admin can post blog

Here, 1= High Priority, 2= Medium Priority, 3= Low Priority

4.2.1 Test Approach

To ensure the quality of my project system, I want to use two different testing, 1. Black box testing, 2. White box testing

They focused mainly on functional testing and structural testing.

- 1. **Black Box Testing:** Black Box testing is used to test functionality of the system. Functionality is tested based on input and output.
- 2. **White box testing:** White box testing is used to tested structure, architecture and mechanism of a system.

4.2.2 Pass / Fail Criteria:

For testing, there are 2 type of criteria –Pass and Fail. The Pass / Fail criteria is prepared based on which output is right which output is wrong.

- System Crash is considered as a failure case.
- If any criteria pass 100% of testing, then it will be considered as pass criteria only.

Test Phase	Time		
Testing plan create	1 week		
Unit testing	During developing time		
Component testing	During developing time		
Integration testing	1 week		
Testing user interface	1 week		
Load testing	1 week		
Performance testing	1 week		
Accessibility testing	1 week		

Table 4.2: Testing Schedule

Project Manager QA leader			Business analyst Lead Target implementation date	
TM-01	Functional	Registration	TEST CASE 4.4.1	
TM-02	Functional	Login	TEST CASE 4.4.2	
TM-03	Functional	View Profile	TEST CASE 4.4.3	
TM-04	Functional	Post Share	TEST CASE 4.4.4	
TM-05	Functional	Booking Nanny	TEST CASE 4.4.5	
TM-06	Functional	Blog	TEST CASE 4.4.6	
TM-07	Functional	Quiz	TEST CASE 4.4.7	
TM-08	Functional	Logout	TEST CASE 4.4.8	

Table 4.3: Traceability Matrix

Testing environment is made with hardware and software, so that the tester may execute what tests mean. There are few testings' region for testing environments which I used for my project testing.

- Test data
- Web Server
- Database Server
- Frontend running environment
- Back end running environment
- Network
- Browser

4.4.1 Registration

Test Case: 01	Test Case Name: Registration
System:	Sub-System:
Designed by: Jannatul Ferdous Shova	Designed date:
Executed by:	Executed date:

Short Description: System will save new user description

Pre-condition:

• User must be have valid name, email

Serial	Name	Email	Password	Expected Result	Pass / Fail	Actual Result	Comment
1	Shova		09876	Email field is required	Fail	Pass	
2	Shova	Shova	Shova	Invalid email	Fail	Pass	
3	Shova	Shova@001 gmail.com	321564	Successfully signed up	Pass	Pass	

Post-Condition: User can log in

Test Case: 02	Test Case Name: Log in
System:	Sub-System:
Designed by: Shova	Designed date:
Executed by:	Executed date:

Short Description: User can access in to the system

Pre-condition:

• User must be have valid email and password

Serial	Email	Password	Expected Result	Pass / Fail	Actual Result	Comment
1		09876	Email field is required	Fail	Pass	
2	Shova	Shova	Invalid email	Fail	Pass	
3			Email and Password field is required	Fail	Pass	
4	Shova@002gmail.com	321564	Successfully signed up	Pass	Pass	

Post-Condition: User can log in

Test Case: 03			Test Case Na	me: Profile				
System:			Sub-System:					
Designe	ed by:Shova		Designed date:					
Execute	ed by:		Executed dat	te:				
Short Description: User view their profile information								
Pre-con	ndition: User must have their own	accour	nt and also logg	ged in to their ac	count			
Serial	Action	Expe	cted Result	Actual Result	Comment			
1	Click on profile option		profile nation	Pass	Pass			
Post-Co	ondition: User can edit th	eir pro	file info	1	1			

Test Case: 04			Test Case Name: Post Share					
System:			Sub-System:					
Designed by: Shova			Designed date:					
Executo	ed by:		Executed date	e:				
Short Description: User can share their post								
Pre-con	ndition: User must have their own	n accou	nt and also logg	ged in to their ac	ecount			
Serial	ial Action Expected Result Pass / Fail Actual Result Commen							
1	Share post	Write timeli	post on ine	Pass	Pass			
Post-Co	ondition: User can view	their po	ost	1	ı	1		

Test Case: 05			Test Case Na	me: Book nanr	ny				
System	System:			Sub-System:					
Design	ed by: Shova		Designed date	Designed date:					
Execut	ed by:	Executed date:							
Short I	Short Description: User book nanny								
	ndition: User must have th	eir own accou	ınt and also log	ged in to their a	ccount				
Serial	Action Expected Result Pass / Fail Actual Result Comment								
1 Booking Check options Pass Pass									
Post-C	ondition: User car	n edit their pro	ofile info	•		•			

Test Case: 06			Test Case Name: Blog						
System:			Sub-System:						
Designe	Designed by: Shova Designed date:								
Execute	ed by:		Executed date:						
Short D	Short Description: User can view Blog								
Pre-con	dition:								
• 1	• User must have their own account and also logged in to their account								
Serial	Action	Expec	ted Result	Pass / Fail	Actual Result	Comment			
1	Click on Blog	View I	Blog	Pass	Pass				

Post-Condition: Admin can update blog

Test Case: 07	Test Case Name: Logout
System:	Sub-System:
Designed by: Shova	Designed date:
Executed by:	Executed date:

Short Description: system will close

Pre-condition:

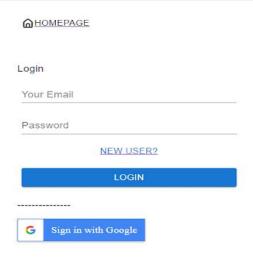
• User must logged in to the system

Serial	Action	Expected Result	Pass / Fail	Actual Result	Comment
1	Click logout button	Session ended	Pass	Pass	

Post-Condition: User can log in again

CHAPTER 5 USER MANUAL

Login & Registration Page





Register Yourself

Your Email

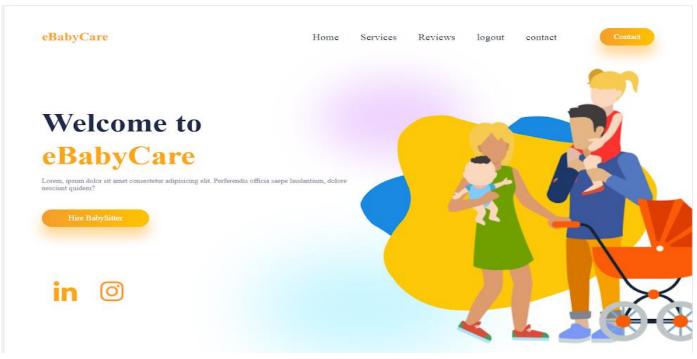
Password

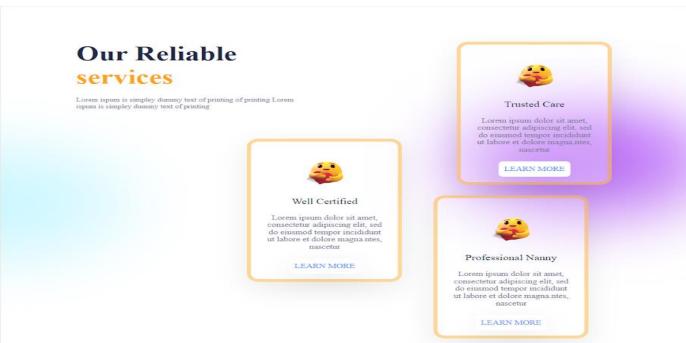
ALREADY REGISTER?

REGISTER



Home Page





Our Affordable

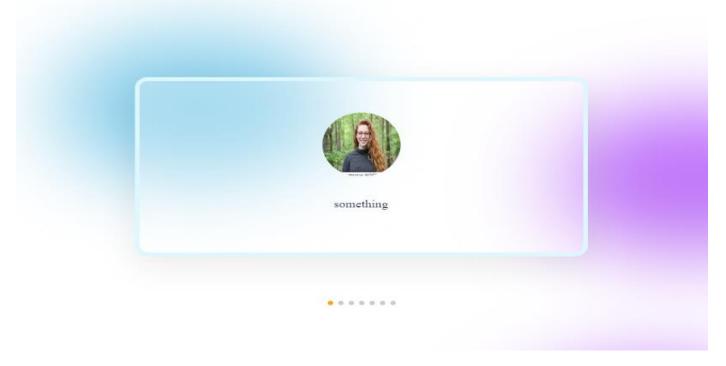
Pricing

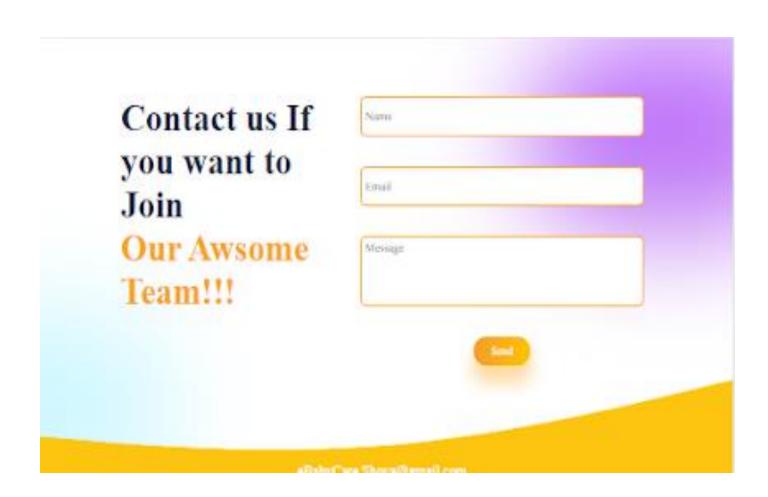
Lorem ispum is simpley dummy text of printing of printing Lorem ispum is simpley dummy text of printing

Fixed Pricing

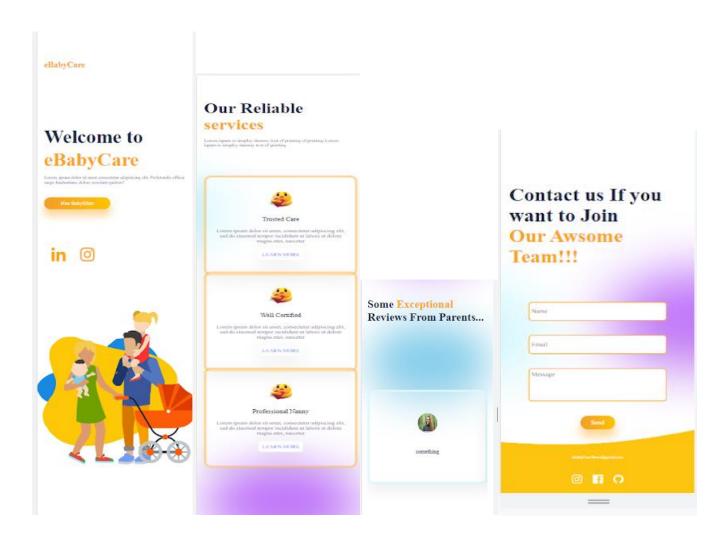
2 Hour: --
5 Hour: --
8 Hour: ----

Some Exceptional Reviews From Parents...

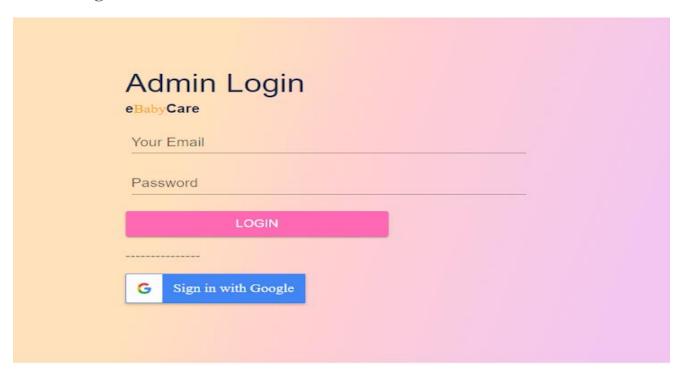




Responsive Homepage



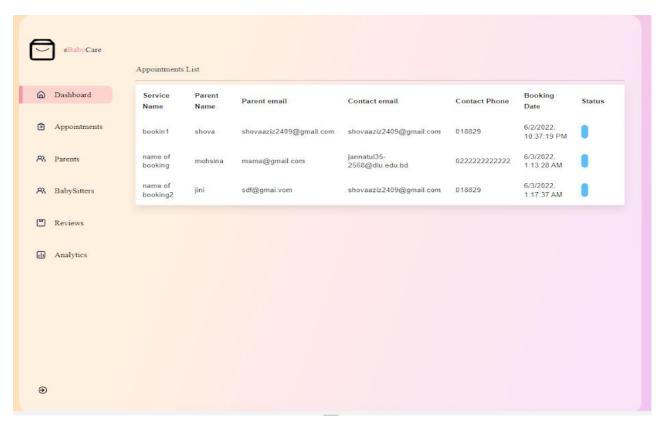
Admin Login



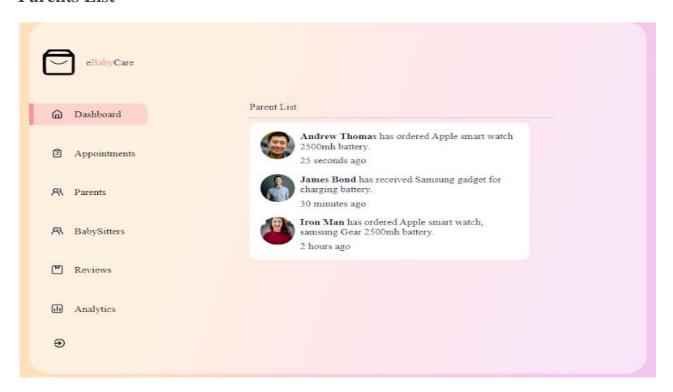
Admin Dashboard



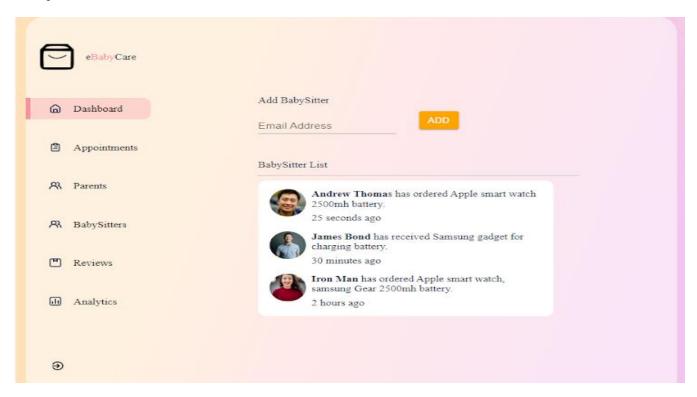
Appointment List



Parents List



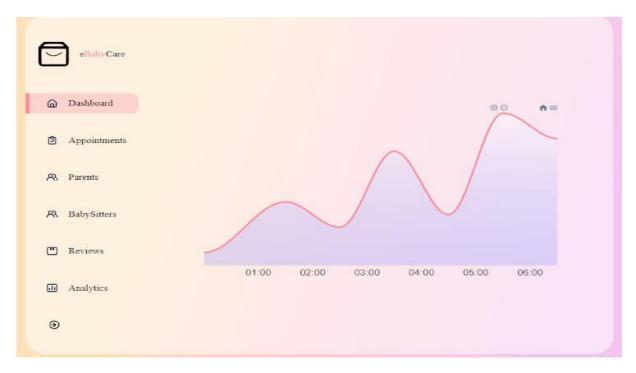
Baby Sitters



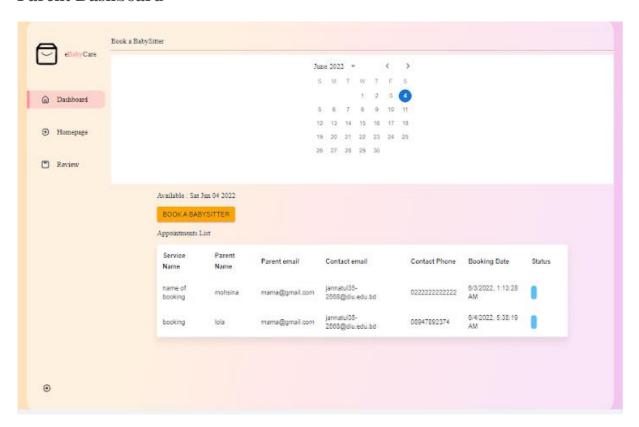
Review List

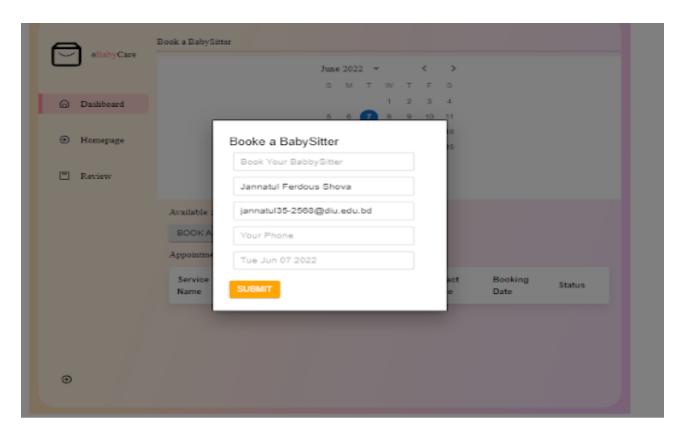


Review Analysis



Parent Dashboard





Review Page



CHAPTER 6 CONCLUSION

6.1 Project Summery

eBabyCare can add a new earning platform to the scocity. And also ease the struggle of the working parents. Such platform is the demand of new era.

6.2 Limitation

- Not fully responsive
- It is a web-based system only
- Automation is required
- This system is not a certified system
- Not fully secure

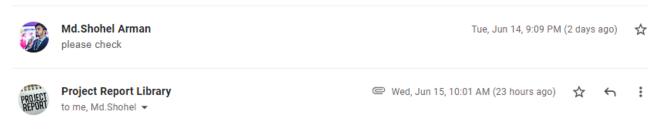
6.3 Obstacles and Achievement

To walk within the great way, one's meet many obstacles and then they get some achievement. I thought I even done it by taking help from my friends, Supervisor, Co-Supervisor and searching many things and answer from Google. I achieve the confident to finish this project by myself.

6.4 Future Scope

- Mobile application can be developed
- Automation of some features
- A certified system can be developed.

Accounts and Library Clearance:



Dear Student,

Your Plagiarism Result is 24% for details Please see the attachment file.

Please read the instruction

- For Library Clearance please fill up your information in Internship Portal. Five fields must be completed as like,
 ID, Name, Department, Project/Internship Title, Supervisor Name.
 http://internship.daffodilvarsity.edu.bd/index.php?app=applicant_login
- · Please attach the supervisor & your signature in the Approval and Declaration page.
- · When you send us a new document, just send a reply to all. Don't create/send new mail.



