



# GHARAD



**Project Supervisor  
DR: Alhejab Alhazmi**

Prepared by :

**Amnah Ali Madkhali**

# Table of Contents/ Outline

<b>Introduction</b>	<b>Abstract</b>
	<b>Problem Statement</b>
Literature Review	Analysis of Existing System and limitations
Scope and Motivation	Project Scope, Aims and Objectives
	Project Motivation, Potential Benefits
System Analysis	System Requirements Specification
	Feasibility Study
	Project Methodology, Tools and Techniques
Project Design	Data Flow Design (System Flow, Algorithms, DFD etc.)
	UML Diagrams (Class, Use case, Activity, Sequence, etc.)
	Database Design (E-R diagram)
Project Plan and Miscellaneous	Work Break Down Structure, Gantt Charts

# **ABSTRACT**

**Educational platform for children to learn names, pictures, and sounds of different things.**

- Offers group of things like (animals, alphabets, and words ) to learn name,sound and picture of it.
- Provides short challenges for enjoyable learning.
- Two types of challenges: picture-name matching and sound-name matching.
  - Developed using PHP and MySQL database.
  - Pages created in HTML, content formatted in CSS, and JavaScript used.
- KEYWORDS: Educational platform, children, learn, names, pictures, sounds, groups, PHP language, MySQL database, HTML, CSS, JavaScript

# Problem Statement

The need for an effective and an engagement tool to

- support children and those people with learning difficulties

# Analysis of Existing System

There are many sites that provide child education services, and here is a list of some of them:

ABCmouse.com.

PBS Kids.

Khan Academy Kids.

National Geographic Kids.

However, we preferred to develop this platform in our own way to encourage children and people who have learning difficulties to learn through the Internet by adding pictures, sound effects, and other features that, if time allowed, we added such as a chatbot to the platform.

The chatbot job is to facilitate the process of using the site, so the users of the site can communicate with it directly and request the topic to be learned, for example (giving the name of the animal), it will display a picture, name and sound of the animal, also it can present some tasks and challenges to the user and then show the result of these challenges

# Limitations and Constraints

- The system may need a high net speed, because it depends on large files such as image files and sound files.
- We are presenting the system in a miniature way, and in the future we will work to feed it with many useful content for children, and the reason is that we have a problem with lack of time and we are making an example to show you what we plan to do while this obstacle will end in the future, that is, it is a temporary obstacle.
- The platform may not cover all educational topics.

# Project Scope

The scope of the project is focusing on children above 3 years old, as well as children who have learning difficulties. It is also possible for children in schools to help them enhance their understanding, awareness, capabilities and skills.

# Aim and Objectives

The Project aims to provide a solution by offering a fun and interactive learning experience that helps children learn the names, pictures, and sounds of different things.

## **OBJECTIVES:**

- Develop an educational platform for children that provides an engaging and interactive learning experience.
- Design short challenges to make learning more enjoyable and promote cognitive and developmental skills.
- Develop a user-friendly interface that is suitable for children of all ages.
- Develop a user-friendly interface suitable for people with learning difficulty.
- Conduct testing with the quality that effectiveness and user-friendliness.

# Project Motivation

- We try to create an educational environment for children and people who have learning difficulties outside of school.
- Provide an opportunity for children and people who have learning difficulties for learn anytime and anywhere.
- Creating a simple and easy-to-use learning environment for children and People who have learning difficulties

# Potential Benefits

- Encourages children to learn in a fun and interactive way, making education more engaging and enjoyable.
- Promotes cognitive and developmental skills through interactive and immersive learning experiences.
- Offers an innovative and modern approach to education that aligns with the needs of today's children.
- Provides an effective tool for parents to monitor their kid's improvement.

# 4. System Analysis

## *Functional requirements:*

### ***Administration:***

Login to the system.  
Manage User (Child).  
    Manage Task.  
    Manage Category.  
View Challenge Score.  
Logout the System.

### ***User (Child):***

Register into System.  
Login to the system.  
    Do Task.  
    Do Challenge.  
View Challenge Score.  
Change Password.  
Logout the System.

# **4. System Analysis**

## **Non-Functional requirements**

- **Security**
- **Performance**
- **Availability**

# 4. System Analysis

## Tools for User

Device	Any device that connects to the Internet .
Browser	Any net browser can browse web pages.
Mouse	Mouse or Touch Screen

## Tools for Developer

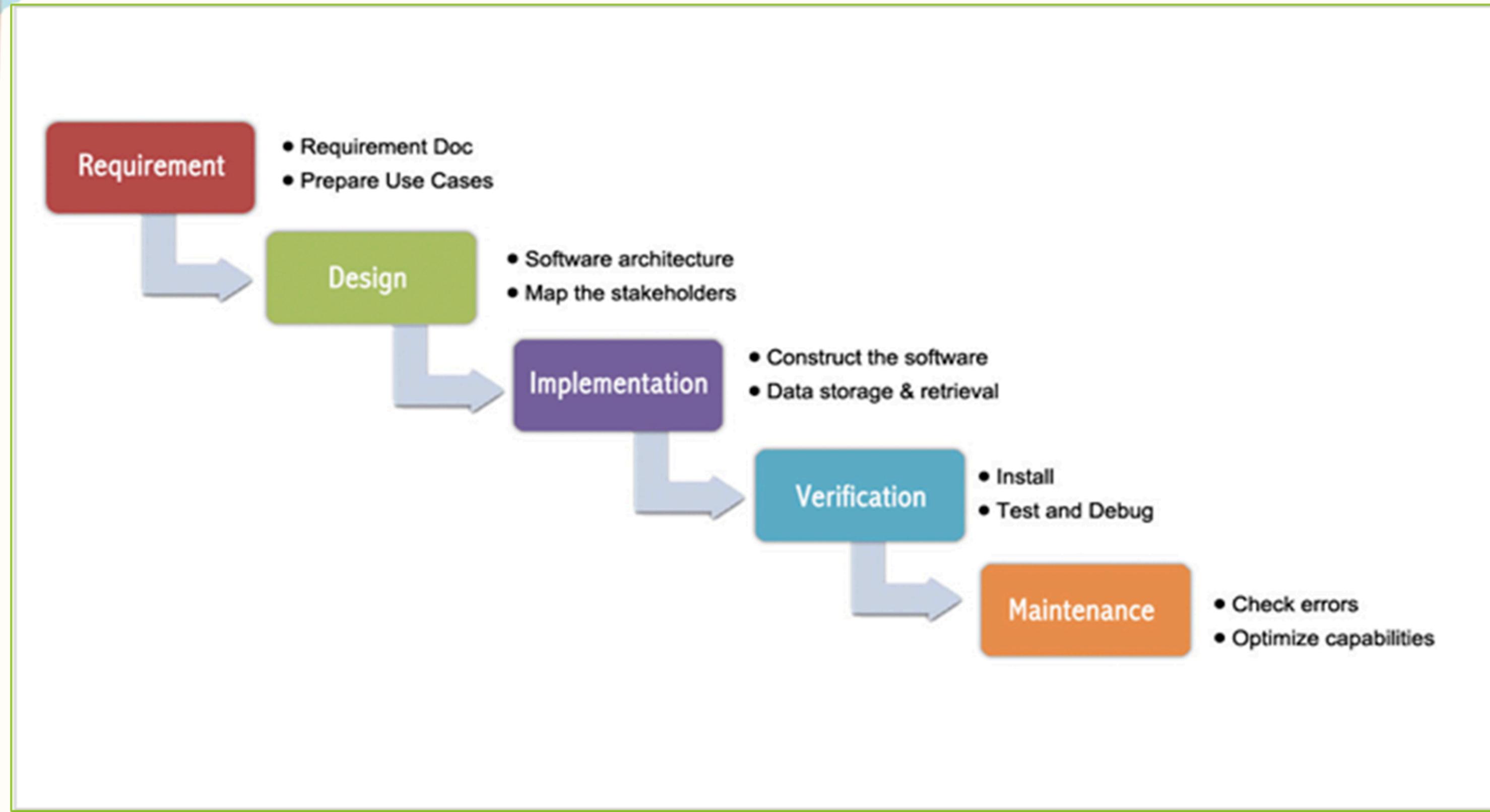
Processor	Ex. Core I3 or above.
RAM	Ex. 4 GB of RAM
Hard Disk	Ex. 256 GB or above free space.
Screen	Any
Keyboard	Any Keyboard
Mouse	Any mouse

## Techniques

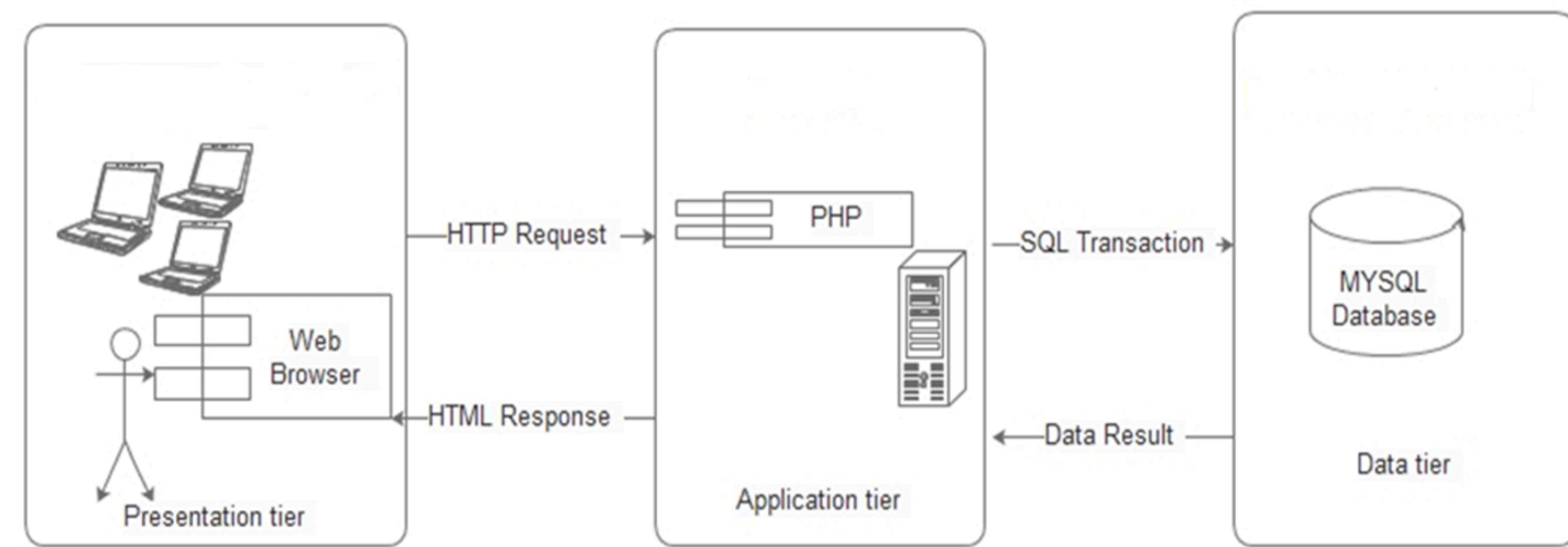
No.	Software's	Used for
1	Apache Server	Web Server Platform
2	HTML and JavaScript	Design the system front end pages
3	PHP Programming Language	Programming Language back end
4	MYSQL Server	System database.
5	Windows 10	Operating System Platform

# 4. System Analysis

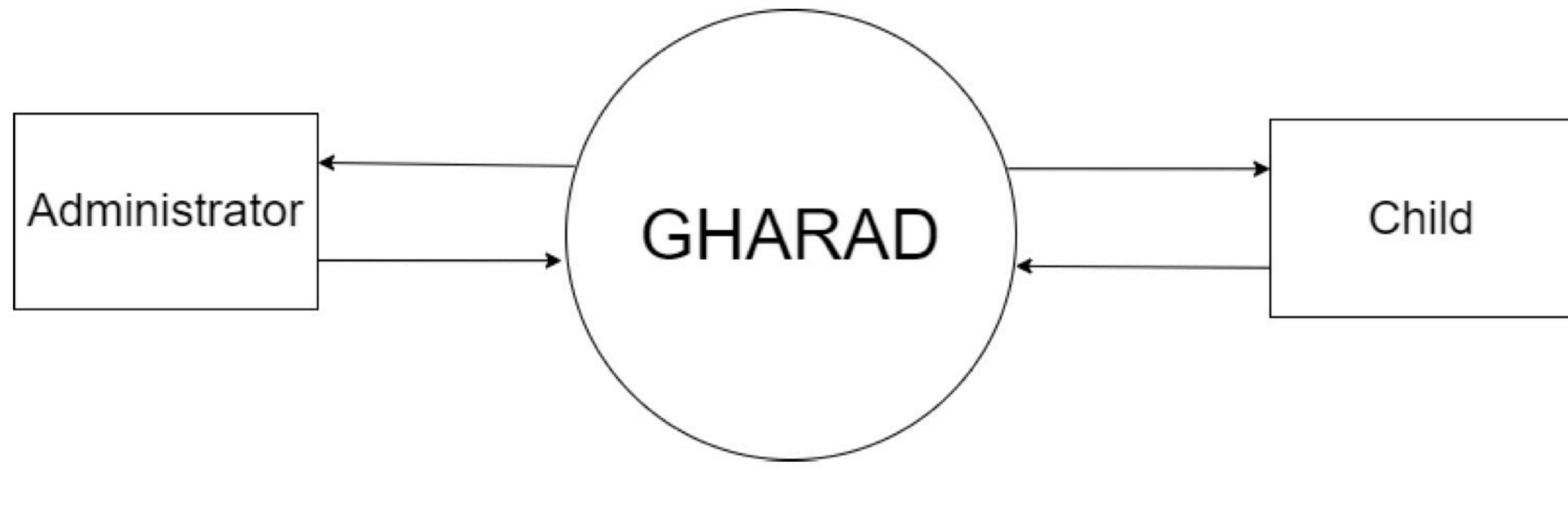
## Project Methodology is Waterfall



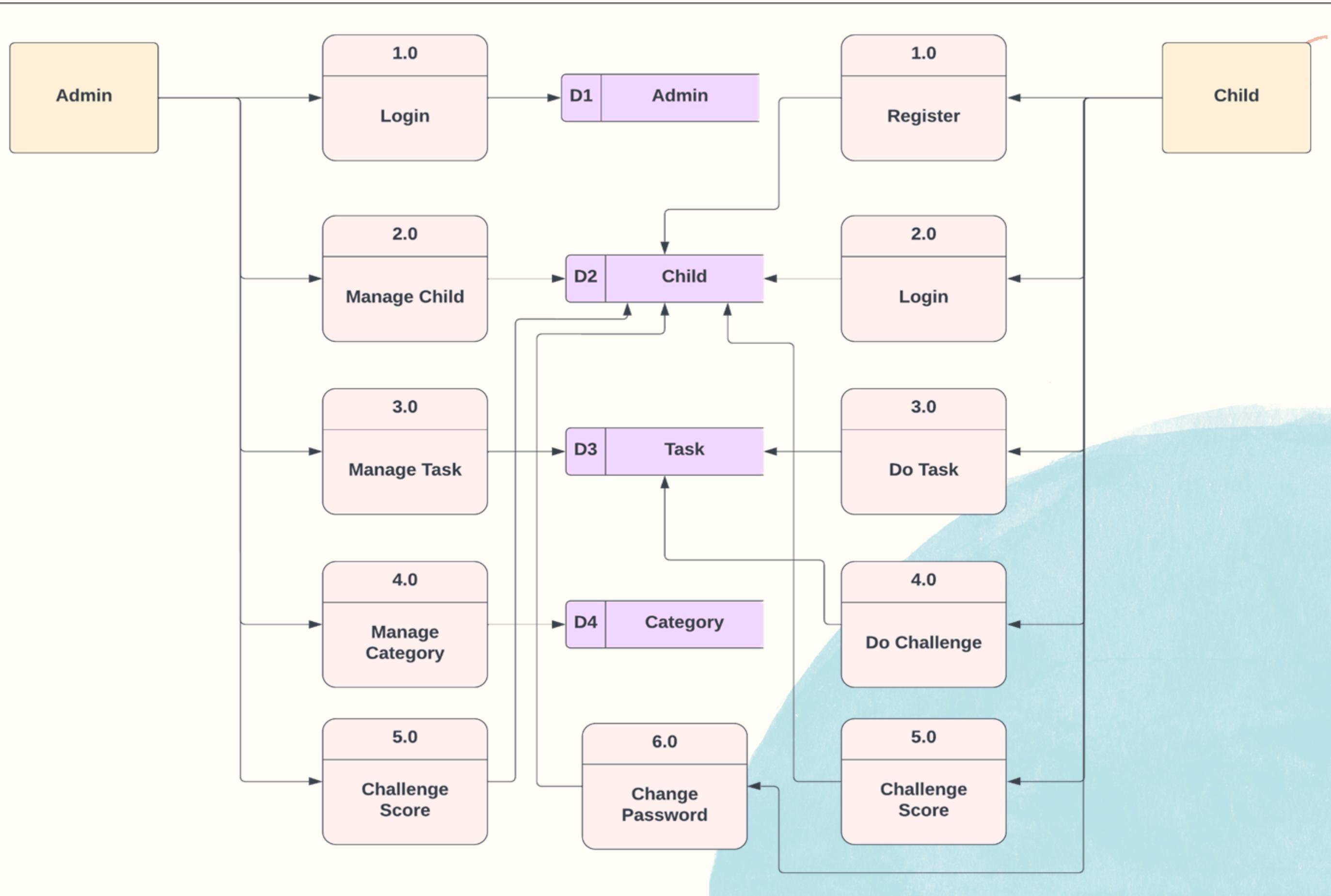
# A three-tier architecture



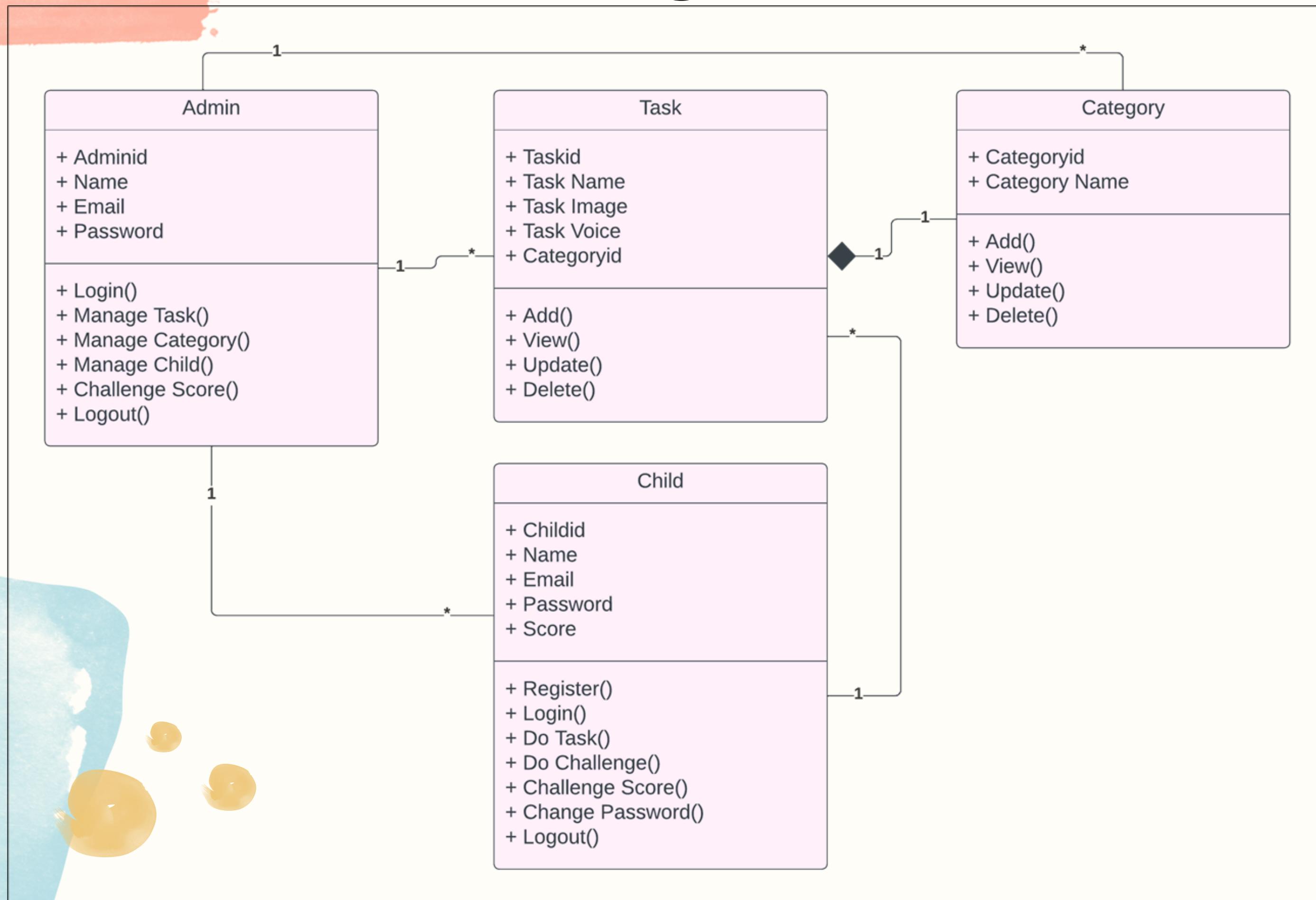
## 5. Context Diagram - DFD Level 0



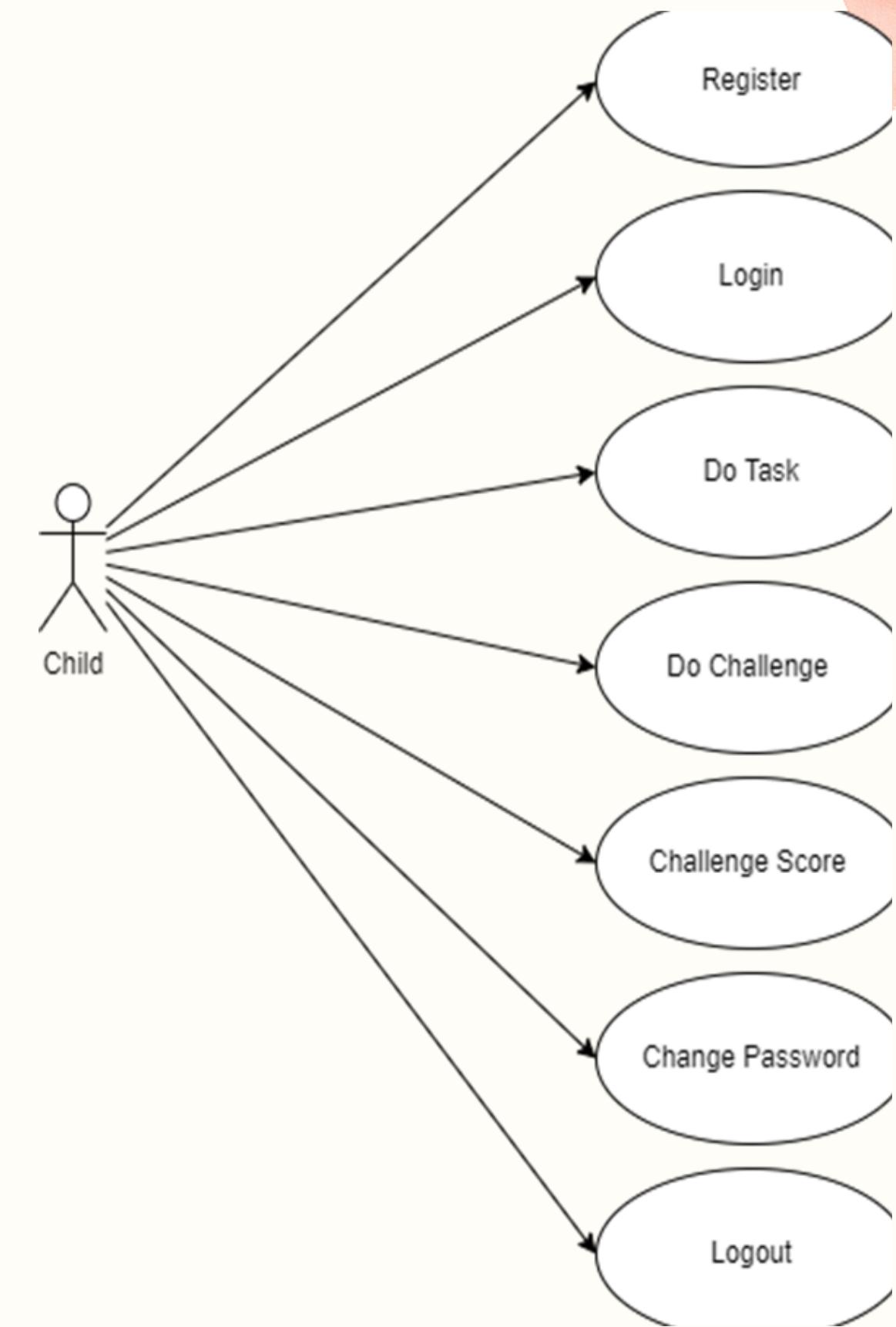
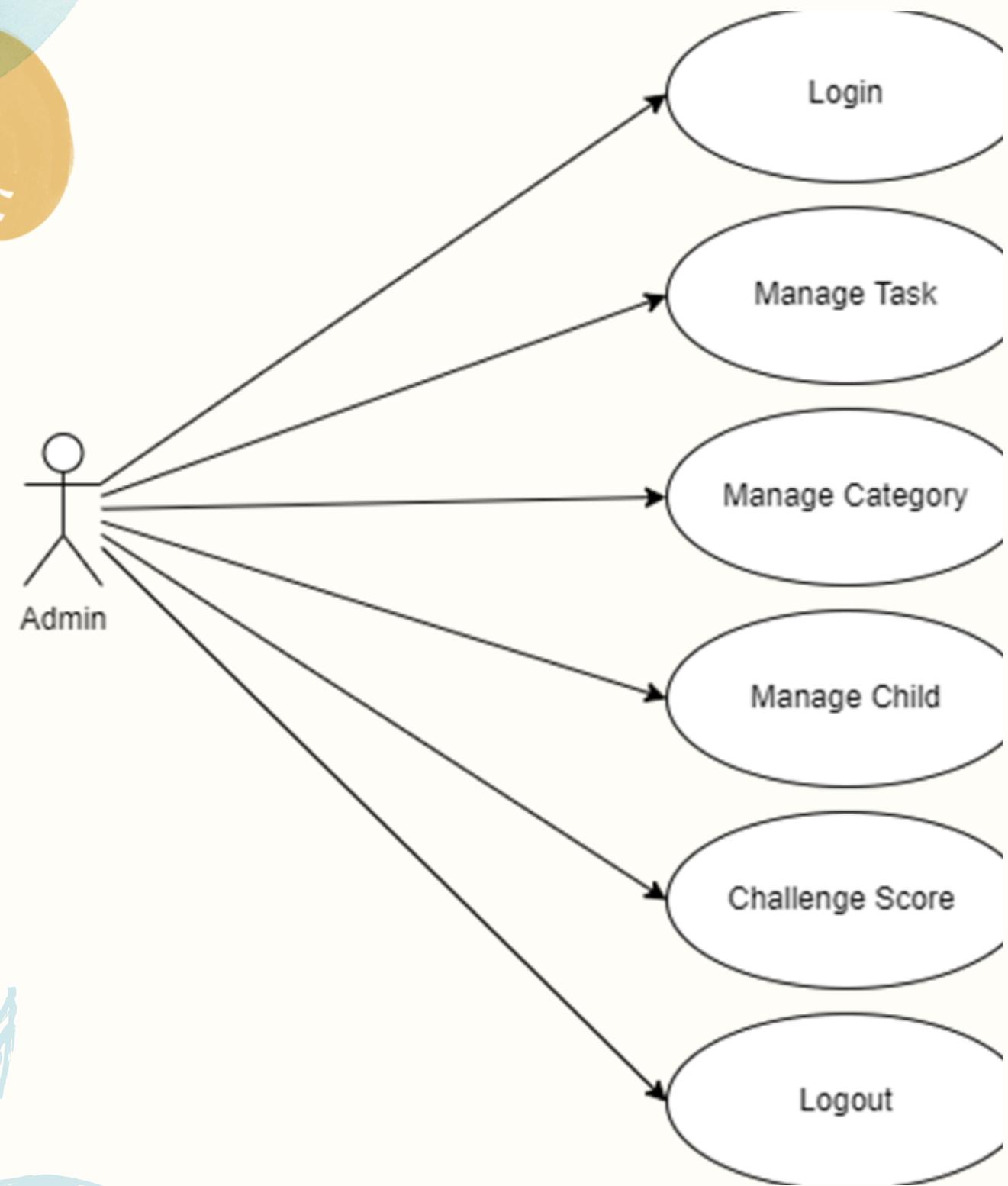
# 5. Data Flow Diagram-Level 1



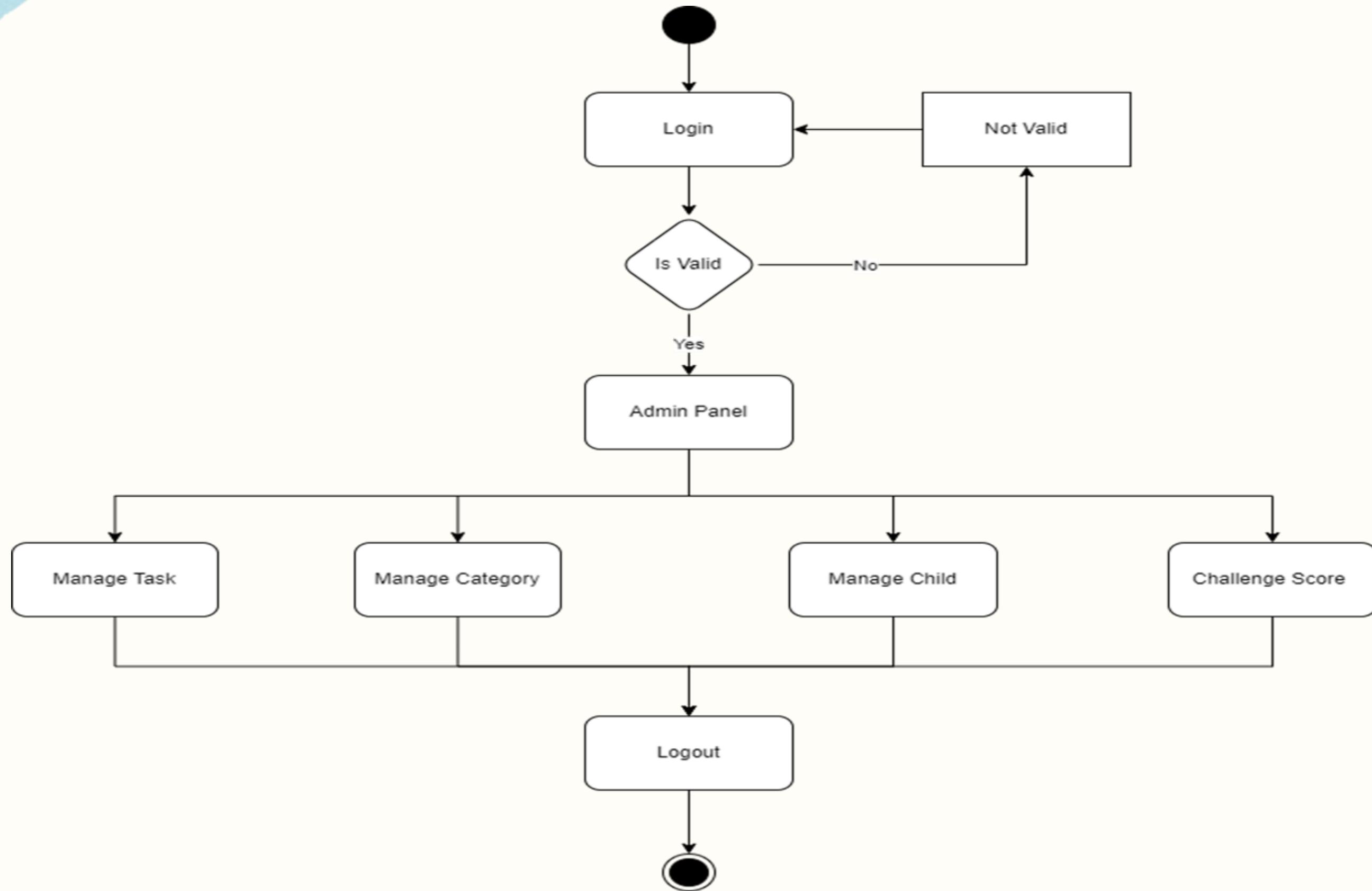
# 5. Class Diagram



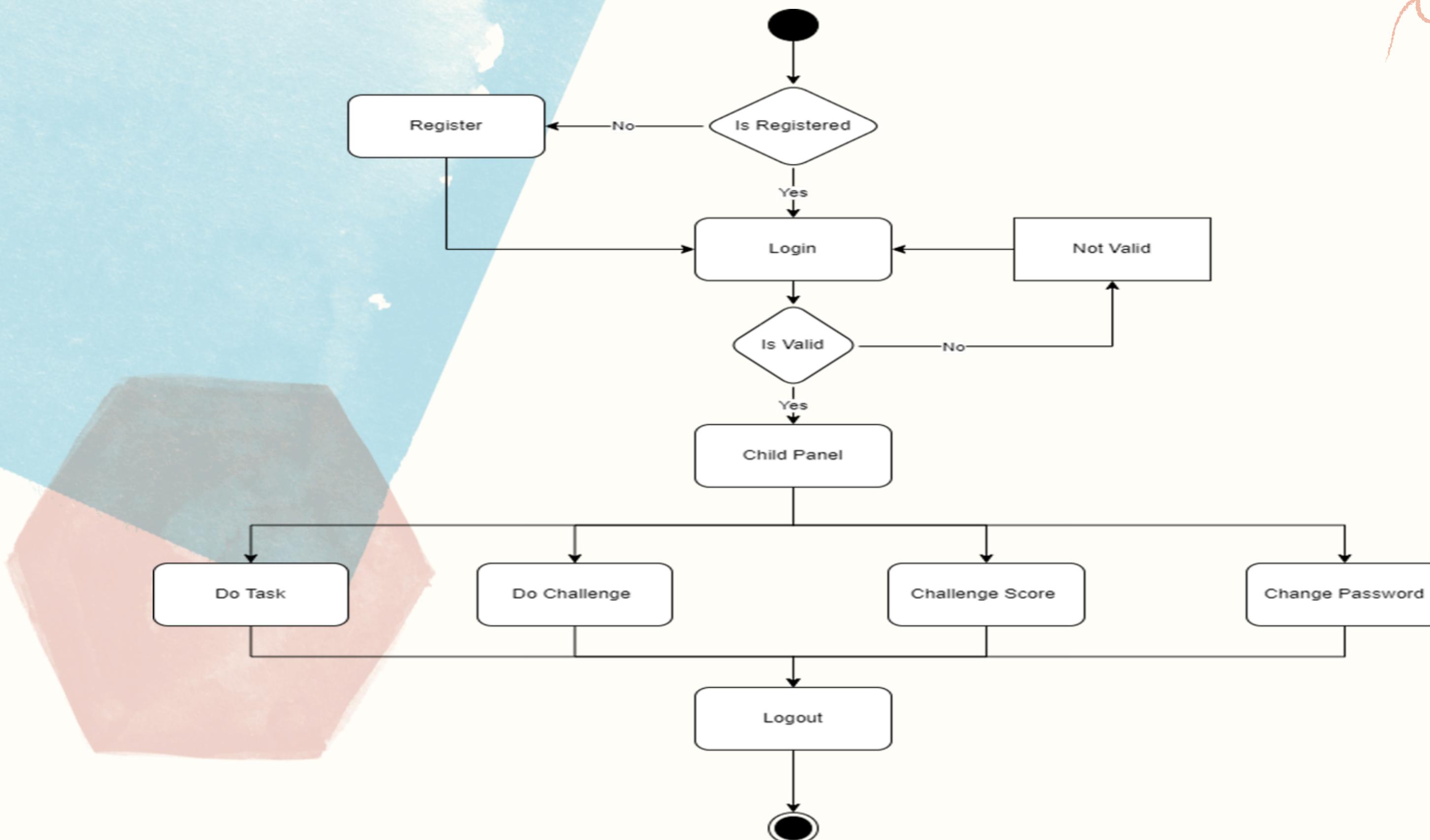
# 5. Use Case Diagram



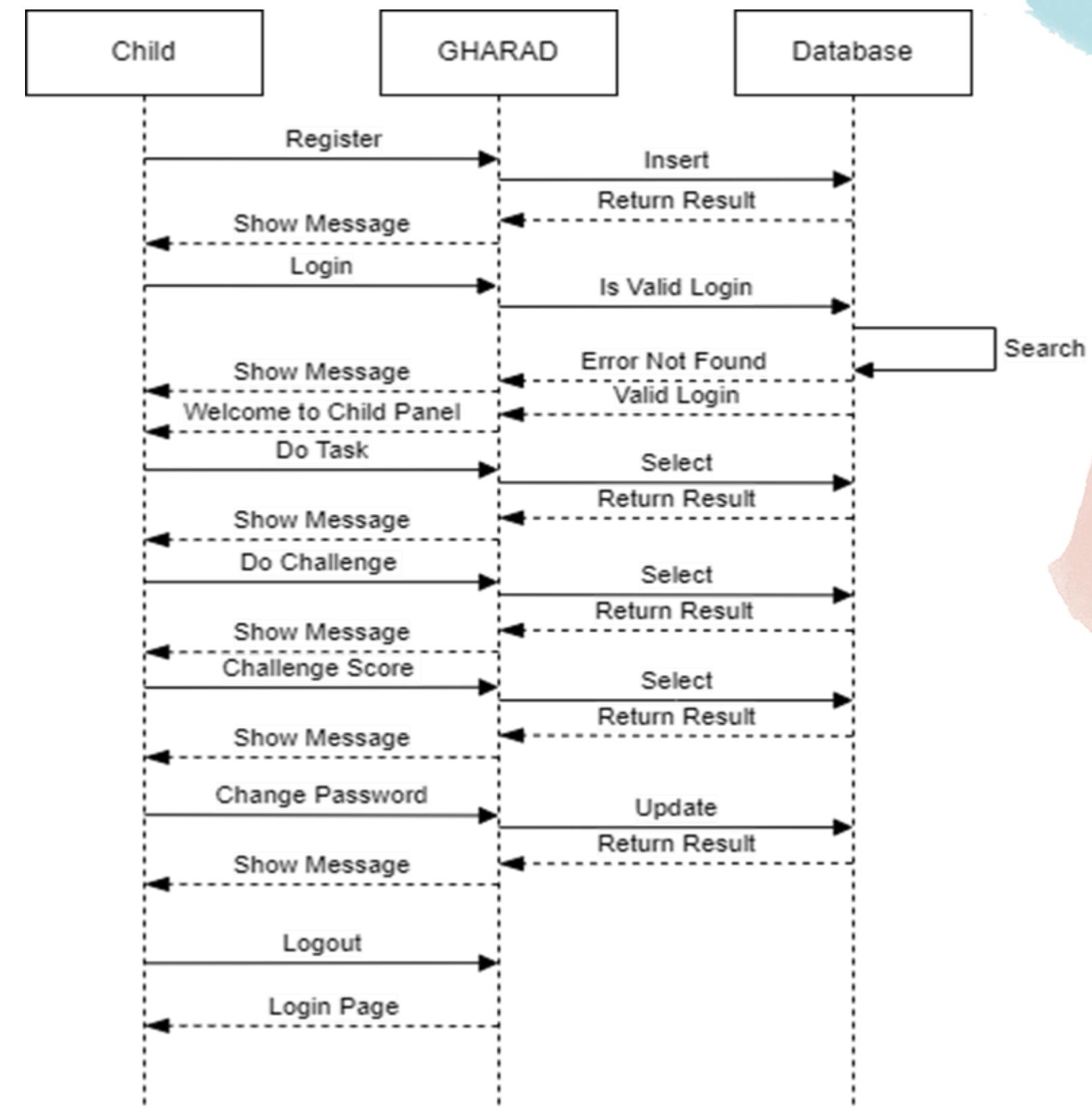
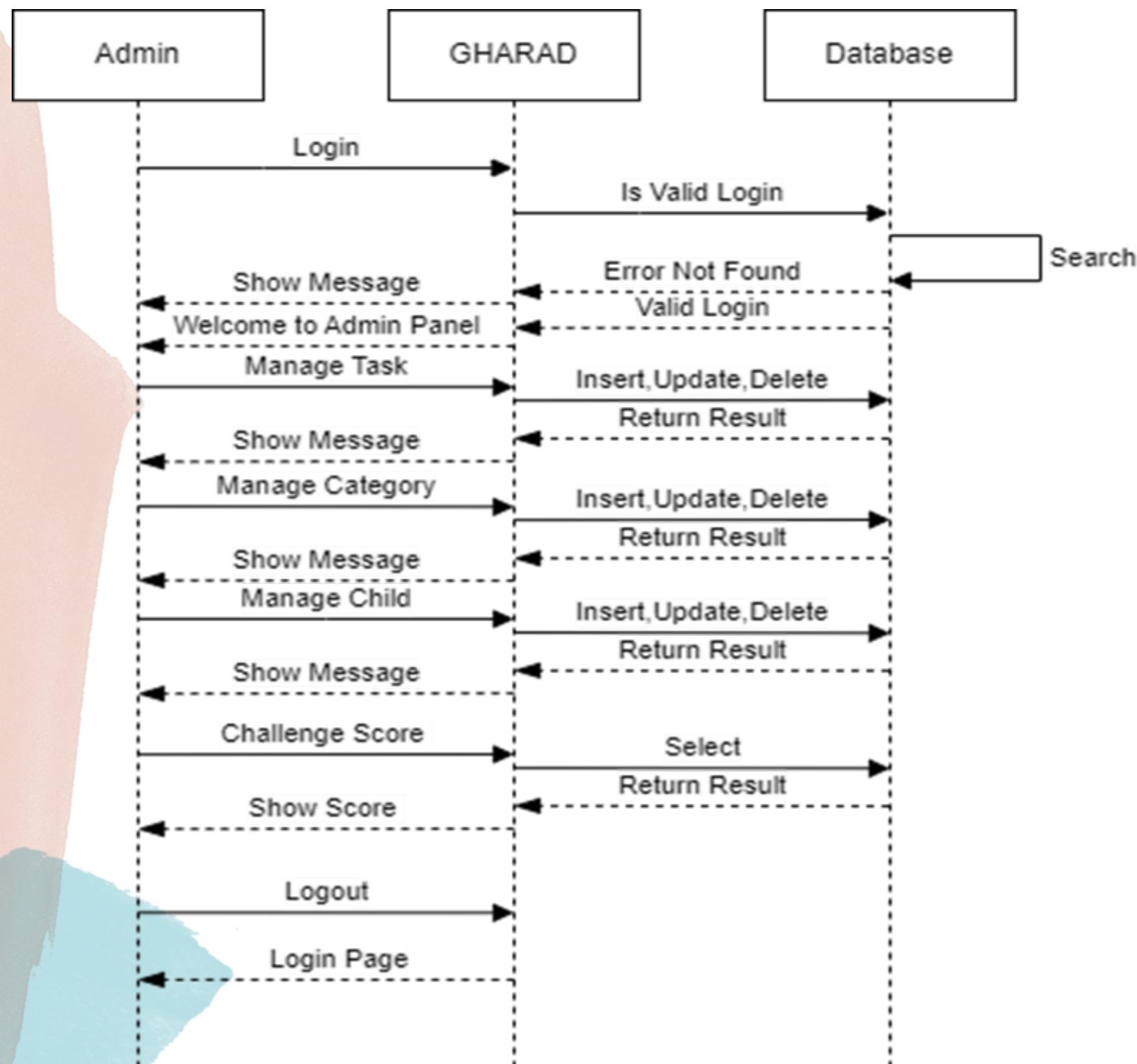
# 5. Admin Activity Diagram



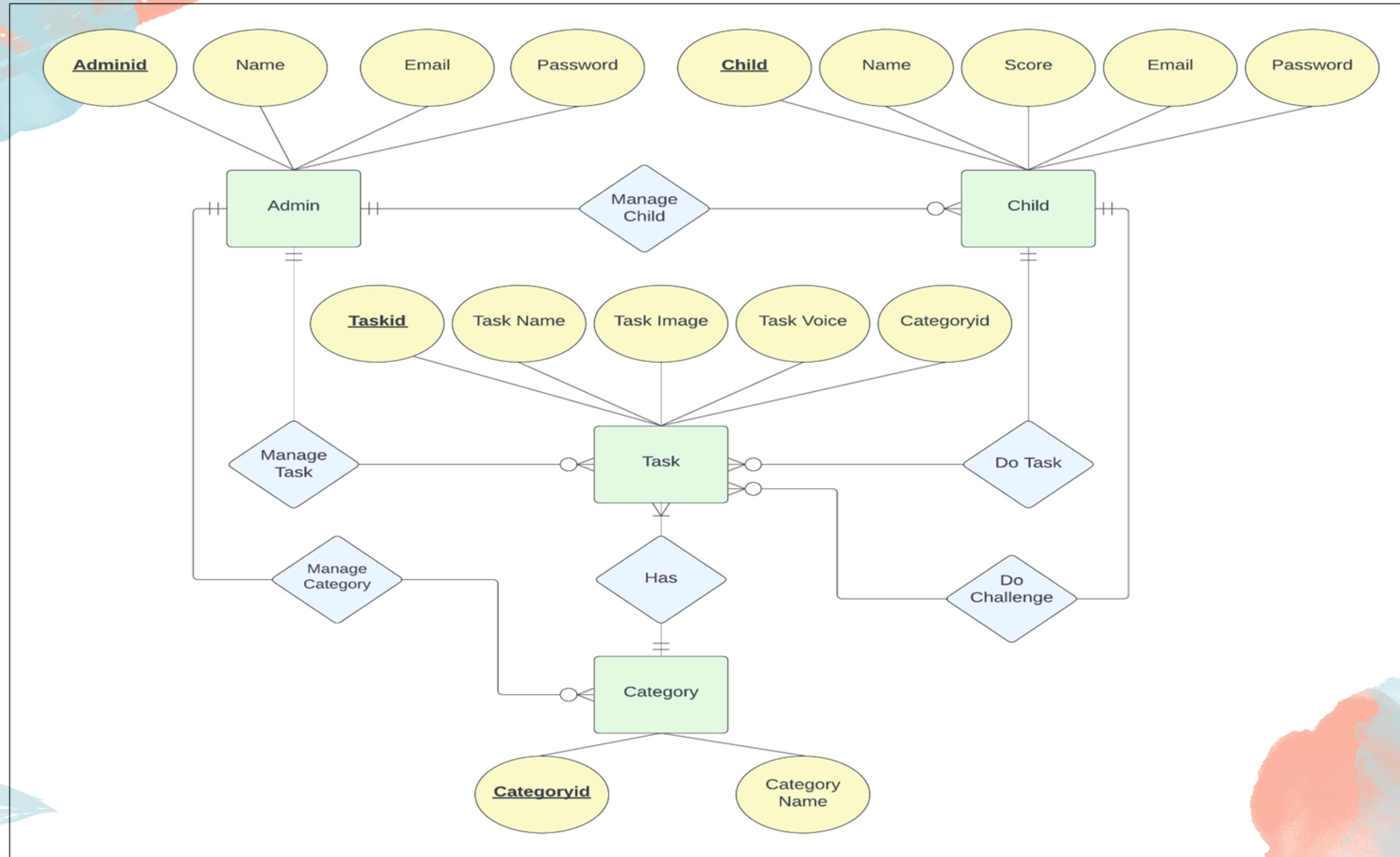
# 5. Child Activity Diagram



# 5. Sequence Diagram

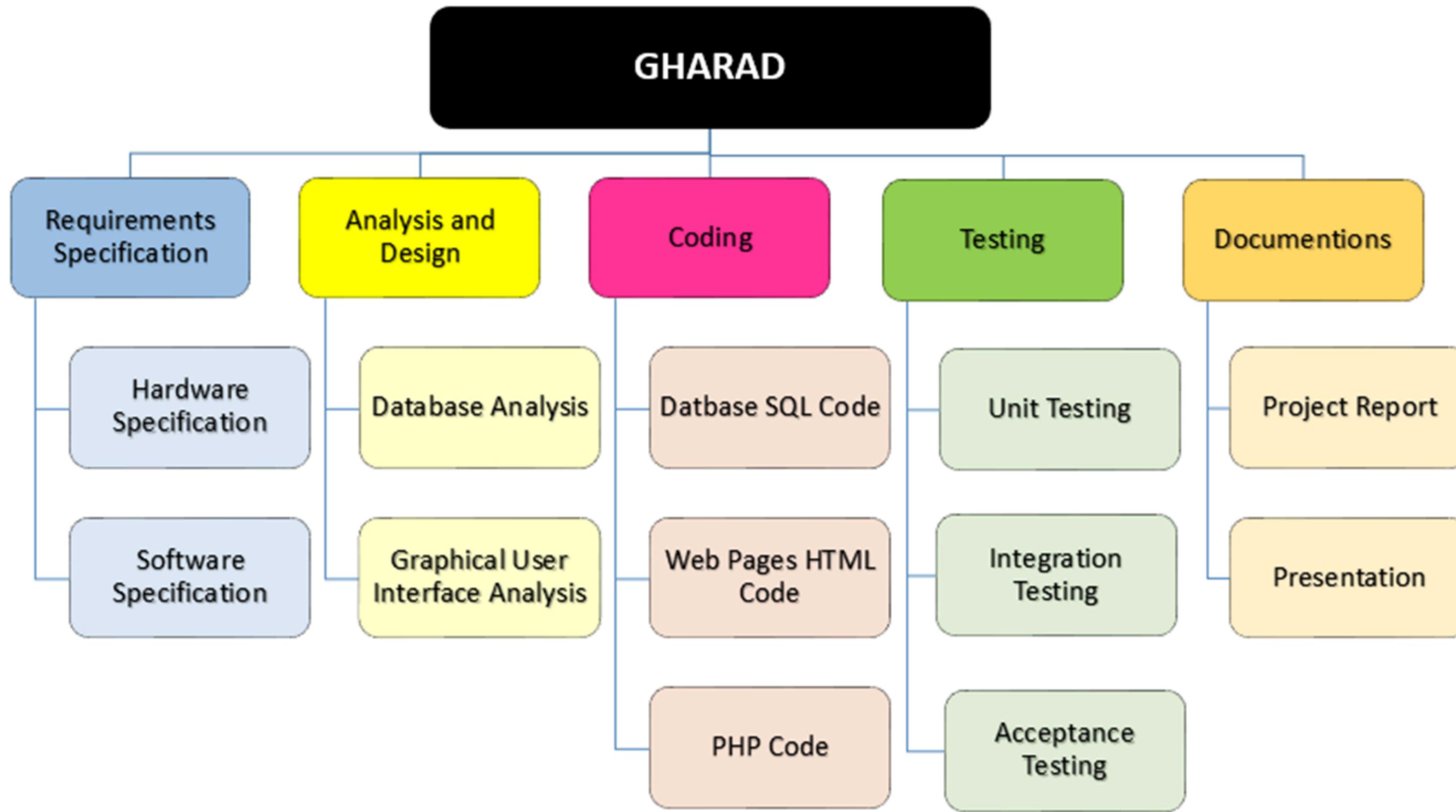


# 5. Project Design-ER Diagram



# 6. Project Plan and Miscellaneous

## Work Break Down Structure :



# ACTIVITY AND TASK LIST:

ID	Task Name	Start	Finish	Duration	Complete
1	✉ GHARAD	2023/3/15	2023/6/15	93.0 d.	63.3%
2	✉ System Requirements Specification	2023/3/15	2023/3/25	11.0 d.	100%
3	Software Requirements Specification	2023/3/15	2023/3/20	6.0 d.	100%
4	Hardware Requirements Specification	2023/3/21	2023/3/25	5.0 d.	100%
5	✉ System Analysis	2023/3/26	2023/4/16	22.0 d.	100%
6	Application Architecture Design	2023/3/26	2023/4/4	10.0 d.	100%
7	UML Analysis	2023/4/5	2023/4/11	7.0 d.	100%
8	Database Analysis	2023/4/11	2023/4/13	3.0 d.	100%
9	Interface Analysis	2023/4/14	2023/4/16	3.0 d.	100%
10	✉ System Coding	2023/4/17	2023/6/1	46.0 d.	44.6%
11	Database Coding	2023/4/17	2023/4/28	12.0 d.	100%
12	Interface Coding	2023/4/29	2023/6/1	34.0 d.	25%
13	System Testing	2023/6/2	2023/6/5	4.0 d.	0%
14	Documentation	2023/6/6	2023/6/15	10.0 d.	50%

# GANTT CHARTS:

ID	Task Name	Start	Finish	Duration	Complete	2023/3/15													2023/6/1		
						23/3	2023/3/18	2023/3/25	2023/4/1	2023/4/8	2023/4/15	2023/4/22	2023/4/29	2023/5/6	2023/5/13	2023/5/20	2023/5/27	2023/6/3	2023/6/10		
1	GHARAD	2023/3/15	2023/6/15	93.0 d.	63.3%	<div style="width: 63.3%; background-color: #2e7131;"></div>													2023/6/1		
2	System Requirements Specification	2023/3/15	2023/3/25	11.0 d.	100%	<div style="width: 100%; background-color: #2e7131;"></div>													2023/6/1		
3	Software Requirements Specification	2023/3/15	2023/3/20	6.0 d.	100%	<div style="width: 100%; background-color: #2e7131;"></div>													2023/6/1		
4	Hardware Requirements Specification	2023/3/21	2023/3/25	5.0 d.	100%	<div style="width: 100%; background-color: #2e7131;"></div>													2023/6/1		
5	System Analysis	2023/3/26	2023/4/16	22.0 d.	100%	<div style="width: 100%; background-color: #2e7131;"></div>													2023/6/1		
6	Application Architecture Design	2023/3/26	2023/4/4	10.0 d.	100%	<div style="width: 100%; background-color: #2e7131;"></div>													2023/6/1		
7	UML Analysis	2023/4/5	2023/4/11	7.0 d.	100%	<div style="width: 100%; background-color: #2e7131;"></div>													2023/6/1		
8	Database Analysis	2023/4/11	2023/4/13	3.0 d.	100%	<div style="width: 100%; background-color: #2e7131;"></div>													2023/6/1		
9	Interface Analysis	2023/4/14	2023/4/16	3.0 d.	100%	<div style="width: 100%; background-color: #2e7131;"></div>													2023/6/1		
10	System Coding	2023/4/17	2023/6/1	46.0 d.	44.6%	<div style="width: 44.6%; background-color: #2e7131;"></div>													2023/6/1		
11	Database Coding	2023/4/17	2023/4/28	12.0 d.	100%	<div style="width: 100%; background-color: #2e7131;"></div>													2023/6/1		
12	Interface Coding	2023/4/29	2023/6/1	34.0 d.	25%	<div style="width: 25%; background-color: #2e7131;"></div>													2023/6/1		
13	System Testing	2023/6/2	2023/6/5	4.0 d.	0%	<div style="width: 0%; background-color: #2e7131;"></div>													2023/6/1		
14	Documentation	2023/6/6	2023/6/15	10.0 d.	50%	<div style="width: 50%; background-color: #2e7131;"></div>													2023/6/1		

# Database Tables

Table	Action	Rows	Type	Collation	Size	Overhead
admin	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	0	InnoDB	latin1_swedish_ci	16 KiB	-
category	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	0	InnoDB	latin1_swedish_ci	16 KiB	-
child	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	0	InnoDB	latin1_swedish_ci	16 KiB	-
task	<a href="#">Browse</a> <a href="#">Structure</a> <a href="#">Search</a> <a href="#">Insert</a> <a href="#">Empty</a> <a href="#">Drop</a>	0	InnoDB	latin1_swedish_ci	16 KiB	-
4 tables	Sum			latin1_swedish_ci	64 KiB	0 B

## All Tables

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	Adminid	int(11)			No	None		AUTO_INCREMENT	<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
2	Name	varchar(255)	latin1_swedish_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
3	Email	varchar(255)	latin1_swedish_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
4	Password	varchar(255)	latin1_swedish_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>

## Admin Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	Childid	int(11)			No	None		AUTO_INCREMENT	<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
2	Name	varchar(255)	latin1_swedish_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
3	Score	int(11)			No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
4	Email	varchar(255)	latin1_swedish_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>
5	Password	varchar(255)	latin1_swedish_ci		No	None			<a href="#">Change</a> <a href="#">Drop</a> <a href="#">More</a>

## Child Table

# Database Tables

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	Taskid 	int(11)			No	None		AUTO_INCREMENT	 Change  Drop ▾ More
2	TaskName	varchar(255)	latin1_swedish_ci		No	None			 Change  Drop ▾ More
3	TaskImage	varchar(255)	latin1_swedish_ci		No	None			 Change  Drop ▾ More
4	TaskVoice	varchar(255)	latin1_swedish_ci		No	None			 Change  Drop ▾ More
5	Categoryid 	int(11)			No	None			 Change  Drop ▾ More

## Task Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	Categoryid 	int(11)			No	None		AUTO_INCREMENT	 Change  Drop ▾ More
2	CategoryName	varchar(255)	latin1_swedish_ci		No	None			 Change  Drop ▾ More

## Category Table

*Inteface*

# GHARAD

Educational platform for children is designed to help them learn the names, pictures, and sounds of different things.

[Learn Now](#)

# GHARAD

Educational platform for children is designed to help them learn the names, pictures, and sounds of different things.

[Learn Now](#)

# Interface



HOME OUR VISION OUR FEATURES LOGIN REGISTER

## Our Features



### Safe and Secure

The platform is designed with safety and security in mind, taking appropriate measures to protect children's privacy and prevent unauthorized access.



### Interactive Activities

The platform offers a variety of interactive activities that help children interact with materials. These include challenges that help reinforce concepts of vocabulary and grammar.



### Picture-based Learning

The platform contains a library of high-quality images that children can interact with. Each picture is clearly labeled with its name, and children are able to click on the picture to hear the name pronounced.



### Audio-based Learning

The platform has an extensive library of audio clips that can be played back to enhance vocabulary and pronunciation. The sound is clear and easy to understand, and includes individual words.

## Registration New Child

Child Full Name

Email Address

Password

[Register](#)[Back](#)

## Registration New Child

Child Full Name

Email Address

Password

## Login Page

Email Address

Password

## Manage Child Records

[Add New Child](#)

#	Name	Score	Email	Password	Action
2	child	12	child@gmail.com	1234	<a href="#">Edit</a> <a href="#">Delete</a>

## Add New Child

Child Name

Email

Password

[Save](#)[Cancel](#)

### Edit Child Record

Child Name

Score

Email

Password

[Update](#) [Cancel](#)



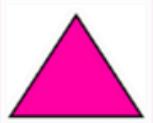
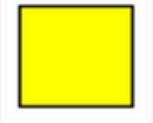
### Delete Child Record

You are in the process of deleting, do you want to continue deleting " child " record?

[Yes](#)[No](#)

## Manage Task Records

[Add New Task](#)

Task id	Task Name	Task Image	Task Voice	Category Name	Action	
23	triangle		 0:00 / 0:01	Shapes	<a href="#">Edit</a>	<a href="#">Delete</a>
24	CAT		 0:00 / 0:02	Animals	<a href="#">Edit</a>	<a href="#">Delete</a>
25	A		 0:00 / 0:03	Alphabet	<a href="#">Edit</a>	<a href="#">Delete</a>
26	Square		 0:00 / 0:02	Shapes	<a href="#">Edit</a>	<a href="#">Delete</a>
27	Circle		 0:00 / 0:02	Shapes	<a href="#">Edit</a>	<a href="#">Delete</a>

## Add New Task

Task Name

Task Image

 No file chosen

Task Voice

 No file chosen

Category Name

 Choose service type[Save](#)[Cancel](#)

### Edit Task Record

Task Name

triangle

Task Image

 No fil...osen

Task Voice

 No fil...osen

Category Name

Shapes

### Delete Task Record

You are in the process of deleting, do you want to  
continue deleting " triangle " record?

## Manage Category Records

[Add New Category](#)

Category ID	Category Name	Action
1	Alphabet	<a href="#">Edit</a> <a href="#">Delete</a>
2	Animals	<a href="#">Edit</a> <a href="#">Delete</a>
3	Shapes	<a href="#">Edit</a> <a href="#">Delete</a>

## Add New Category

Category Name

 Name[Save](#)[Cancel](#)

### Edit Category Record

Category Name

[Update](#)[Cancel](#)

### Delete Category Record

You are in the process of deleting, do you want to continue deleting " Alphabet " record?

[Yes](#)[No](#)

## View Challenge Score

Child Id	Child Name	The Score
2	child	12



### Login Page

Email Address

Password

[Login](#)[Back](#)