# KALARAV – THE STEP TOWARDS BABY CARE

**A PROJECT REPORT**

***Submitted by***


**JAIMIN MANIYAR**

(120470107032)


***In fulfillment for the award of degree of***

**BACHELOR OF ENGINEERING**

***in***

**Computer Department**

**V.V.P. ENGINEERING COLLEGE, RAJKOT**

**Gujarat Technological University**

**Ahmedabad**



May, 2016

**V.V.P. Engineering College**

Computer Engineering Department
May, 2016

# CERTIFICATE

**Date: 18 – 04 – 2016**

This is to certify that the IDP entitled **"KALARAV – THE STEP TOWARDS BABY CARE"** has been carried out by **JAIMIN MANIYAR** under my guidance in fulfillment of the degree of Bachelor of Engineering in Computer Engineering ($8^{th}$ Semester) of Gujarat Technological University, Ahmadabad during the academic year 2015-16.

**Guide:**

Prof. Girish Mulchandani

**Head of the Department:**

Dr.Tejas Patalia

Exorior Technologies Pvt. Ltd.

Date: 19th April 2016

To,
Head of Department,
V.V.P Engineering College ,
Rajkot

**Subject: Completion Certificate**

I confirm that as of today, **Mr. Jaimin Rajenbhai Maniyar** (Enrolment No.-120470107032) of your college has completed his training in this company. I confirm that his work was satisfactory and wish him best of luck for his future. I also refer him for any IT job pertaining to his training subjects.

For, Exorior Technologies Pvt. Ltd.

Mr. Pranav Suchak
( Director )

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| Periodic Progress Reports (PPR) | **Completed** |
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| Patent Drafting Exercise (PDE) | **Completed** |
| Final Plagiarism Report | **Completed** |
| Final Project Report | **Completed** |

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| Unique | , to buy best quality baby care product & to find helping hand for parents | - |
| Unique | One can easily login to get any kind of information discussed above | - |
| Unique | Here the user is also facilitated with blog by which parents can know various things & discussion forum by which parents can solve any type of query by discussion | - |
| Unique | One can get the best quality product form product store easily without moving from place to place | - |
| Unique | Retailers can also have a chance of introducing their products not only in a single place but throughout the world using online application | - |
| Unique | Parents can take counselling also from online counselor | - |
| Unique | Application have a good team of writers for blog which writes various articles on Food, Diet, Baby Care, Mother Care etc | - |

| | | |
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| Unique | This system is to provide user friendly environment to search all type answers raise by parents regarding perinatal care issue | - |
| Unique | In current online system there is no proper user interface for such functionality for discussion related to perinatal care | - |
| Unique | It only contains written blog articles not mo | - |
| Unique | Here there is an also facility of online games for child of age 5 to 10 & for small children there is a facility of E - Kindergarten | - |
| Unique | GOALS AND OBJECTIVES My project named "Kalarav - The Step Towards Baby Care" is an Java EE based web application which provides information related to baby & mother | - |

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1. INTRODUCTION0.1 PROJECT SUMMARY "Kalarav - The Step Toward Baby Care" project is basically design for helping a society via noble costs. I would make this website to answer the issue of `How to take care of the infants & to help their parents? . This website has various modules for what precautions should be made during pregnancy? ; How to take care of new born baby?, to buy best quality baby care product & to find helping hand for parents. One can easily login to get any kind of information discussed above. Here the user is also facilitated with blog by which parents can know various things & discussion forum by which parents can solve any type of query by discussion. One can get the best quality product form product store easily without moving from place to place. Retailers can also have a chance of introducing their products not only in a single place but throughout the world using online application. Here there is an also facility of online games for child of age 5 to 10 & for small children there is a facility of E - Kindergarten The main goal is to provide the best suggestion & care options to parents of new born baby or we can say that application helps new parents. Parents can take counselling also

from online counselor. Application have a good team of writers for blog which writes various articles on Food, Diet, Baby Care, Mother Care etc. 1.2 PURPOSE: GOALS AND OBJECTIVES My project named "Kalarav - The Step Towards Baby Care" is an Java EE based web application which provides information related to baby & mother care as well as system can help to find helping hand & have a fun part also for children. This system is to provide user friendly environment to search all type answers raise by parents regarding perinatal care issue. In current online system there is no proper user interface for such functionality for discussion related to perinatal care. It only contains written blog articles not mo

# *DECLARATION*

I hereby declare that the project entitled **"KALARAV – THE STEP TOWARDS BABY CARE"** submitted in partial fulfillment for the degree of **Bachelor of Engineering** in **Computer Engineering** to Gujarat Technological University**,** Ahmedabad**,** is a bonafide record of the project work carried out at **V.V.P. ENGINEERING COLLEGE** under the supervision of **P R O F . GIRISH MULCHANDANI** and that no part of the IDP/UDP has been presented earlier for any degree, diploma, associate ship, fellowship or other similar title of any other university or institution.

Jaimin Maniyar

120470107032

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# NOTATIONS, NAMING CONVERSION AND ABBREVIATIONS

## NOTATIONS

**NOTATION FOR USE CASE**

ACTOR

USE CASE

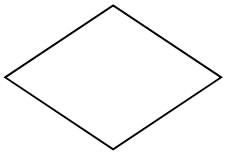
ASSOCIATION

INCLUDE

**NOTATION FOR ACTIVITY DIAGRAM**

ACTIVITY

BRANCH/DECISION



CONTROL FLOW

# NAMING AND CODING CONVENTION

Naming conventions

Objects should be named with a consistent prefix that makes it easy to identify the type of object.

Recommended conventions for Database

**Table**

- Table name must be in small case only. With all the tables containing id field compulsory and status field wherever possible.

**Field Name**

- Fields of any table may contain 3 or 4 parts in the name. Field names with more than 4 parts should be avoided. Name of fields should be in small case only.

**Foreign Key**

- Foreign key should be created on column/columns in tables wherever required to maintain integrity with other tables.
- Foreign key should be created on a single or combination of columns depending on the requirement.
- The referenced column/columns should be the primary/composite primary key of the referenced table.

# ABBREVIATIONS

| ABBREVIATIONS | REPRESENTS |
|---|---|
| HTML | Hyper Text Markup Language |
| CSS | Cascading Style Sheet |
| JAVA EE | Java Enterprise Edition |
| JSON | JavaScript Object Notation |
| XML | Extended Markup Language |
| IDE | Integrated Development Environment |
| AJAX | Asynchronous JavaScript & XML |
| API | Application Programming Interface |

# ACKNOWLEDGEMENT

With a deep sense of gratitude and respect I would like to extend my heartiest thanks to all those who provided me immense help and guidance during my training period.

First and foremost I thanks to **Mr.Pranav Shuchak** for providing an opportunity to undertake this project at **Exorior Technologies Pvt. Ltd.** And their whole hearted support at each and every step during the project.

I would also like to thank my project guide **Prof. Girish Mulchandani** for having shown confidence in my work and giving me an opportunity to work under his guidance. He always devoted their time to sort out queries and discuss various issues related to the project.

I express my gratitude to **Dr.Tejas Patalia (HOD CE)** for his timely help and for showing keen interest in our work, which enabled us to complete it in assigned span of time. I am also thankful to entire staff of V.V.P. for their constant encouragement, suggestion and moral support throughout the duration of our project.

Jaimin Maniyar

(120470107032)

V.V.P. Engineering College (Rajkot)

# ABSTRACT

The main aim of this project is to build a Web application that helps the parents of new born babies i.e. I want to help the society with my web application. My web application has various features to help pregnant lady during pregnancy & after birth of child. It also contains an online store for purchasing of best quality products at low rate for baby & also provides an online baby-sitting service. The main features provided by the "Kalarav – The Step Towards Baby care" application are as follows:

- Get online free guidance from best doctors, dietitians on food, diet, baby care, mother care etc.
- When new baby is born the details of baby is filled on online web portal by hospital staff which used for generating of birth certificate, vaccination card online.
- Vaccination reminder through SMS & E-Mail.
- Detailed description for new parents about what care should be taken during pregnancy and after pregnancy.
- Parents can buy the best quality products for baby at low cost.
- Parents can store record of baby of like eating habits, sleeping habit, family details, interests of baby, other health related details, etc.
- Parents can make an online photo diary for baby as to keep the 'good memories from childhood'.
- It also contains a module for hiring a baby sitter whenever required.
- Functionality for growth of child
    - E-kindergarten
    - Fun parts for children.

# 1. INTRODUCTION

## 1.1 PROJECT SUMMARY

"Kalarav – The Step Towards Baby Care" project is basically design for helping a society via noble costs. I would make this website to answer the issue of 'How to take care of the infants & to help their parents? '. This website has various modules for what precautions should be made during pregnancy? ; How to take care of new born baby? to buy best quality baby care product & to find helping hand for parents.

One can easily login to get any kind of information discussed above. Here the user is also facilitated with blog by which parents can know various things & discussion forum by which parents can solve any type of query by discussion.

One can get the best quality product form product store easily without moving from place to place. Retailers can also have a chance of introducing their products not only in a single place but throughout the world using online application. Here there is an also facility of online games for child of age 5 to 10 & for small children there is a facility of E – Kindergarten

The main goal is to provide the best suggestion & care options to parents of new born baby or we can say that application helps new parents. Parents can take counselling also from online counselor. Application have a good team of writers for blog which writes various articles on Food, Diet, Baby Care, Mother Care etc.

## 1.2 PURPOSE: GOALS AND OBJECTIVES

My project named “Kalarav – The Step Towards Baby Care” is an Java EE based web application which provides information related to baby & mother care as well as system can help to find helping hand & have a fun part also for children. This system is to provide user friendly environment to search all type answers raise by parents regarding perinatal care issue.

In current online system there is no proper user interface for such functionality for discussion related to perinatal care. It only contains written blog articles not more than that. Sometimes it is boring task to read such articles online so my web app will remove this problem in good way by periodically counselling of parents & discussion forum.

In current manual system the pregnant lady may take suggestions from other ladies or elder women of family but it will lead to misguide sometimes. So one authenticated online system is needed which have all the module related from a lady became pregnant to child became 10 years.

My project contains all module in one place so need to check various website for various task. There are following objectives those we try to provide in our applications which given below:

- Guide related to pre berth precautions
- Application used anytime and anywhere
- Online Photo Diary for storing good memories of child
- Parents can buy baby care products & toys.
- Parents can hire Baby Sitter
- Admin can do all type of Website management.
- Any registered user can post in blog and reply in discussion forum.
- Children can play online games which are design for brain development.

## 1.3 SCOPE

Project Kalarav provides maximum facility to new parents to fulfil all type of their requirement.

Here I define the scope of the system at user and admin interface.

- User Interface:
  - Blog (All Users)
  - Discussion Forum (All Users)
  - Baby Name suggestion module (All users)
  - Link to facility of Government online birth certification application (All users)
  - Login/Sign up (All Members)
  - Manage User profile (All Members)
  - Online Photo Diary (Only Parents)
  - Hire Baby Sitter (Only Parents)
  - Vaccination alert Reminder (Only Parents)
  - Online Games (Only Children)
  - Buy Products Online (Only Parents)
  - Seller’s Dashboard (Only Seller)
  - Babysitter’s Dashboard (Only Babysitter)

- Admin Interface:
  - Add/update/delete Blog Post
  - Add/update/delete Discussion Thread
  - Manage Reply & Comments
  - Adding of Abuse Word
  - Enable or Disable Users
  - Generation of online games
  - Add contents in website pages like About Us, Contact Us etc.

## 1.4 TECHNOLOGIES AND LITERATURE REVIEW OF PAST WORK

**Tools and Technologies**

Developing Language: Java EE, HTML5, CSS3

IDE Used : Notepad++, Eclipse IDE

Back End : MySQL 5.0

FrameWork : BootStrap 3.x, jQuery 1.11.x

### 1.4.1 Brief Introduction to Java EE

Developers today increasingly recognize the need for distributed, transactional, and portable applications that leverage the speed, security, and reliability of server-side technology. **Enterprise applications** provide the business logic for an enterprise. They are centrally managed and often interact with other enterprise software. In the world of information technology, enterprise applications must be designed, built, and produced for less money, with greater speed, and with fewer resources.

With the Java Platform, Enterprise Edition (Java EE), development of Java enterprise applications has never been easier or faster. The aim of the Java EE platform is to provide developers with a powerful set of APIs while shortening development time, reducing application complexity, and improving application performance.

The Java EE platform is developed through the Java Community Process (JCP), which is responsible for all Java technologies. Expert groups, composed of interested parties, have created Java Specification Requests (JSRs) to define the various Java EE technologies. The work of the Java Community under the JCP program helps to ensure Java technology's standard of stability and cross-platform compatibility.

The Java EE platform uses a simplified programming model. XML deployment descriptors are optional. Instead, a developer can simply enter the information as an **annotation** directly into a Java source file, and the Java EE server will configure the component at deployment and runtime. These annotations are generally used to embed in a program data that would otherwise be furnished in a deployment descriptor. With annotations, you put the specification information in your code next to the program element affected.

In the Java EE platform, dependency injection can be applied to all resources a component needs, effectively hiding the creation and lookup of resources from application code. Dependency injection can be used in EJB containers, web containers, and application clients. Dependency injection allows the Java EE container to automatically insert references to other required components or resources, using annotations.

This tutorial uses examples to describe the features available in the Java EE platform for developing enterprise applications. Whether you are a new or experienced Enterprise developer, you should find the examples and accompanying text a valuable and accessible knowledge base for creating your own solutions.

The most important goal of the Java EE 6 platform is to simplify development by providing a common foundation for the various kinds of components in the Java EE platform. Developers benefit from productivity improvements with more annotations and less XML configuration, more Plain Old Java Objects (POJOs), and simplified packaging. The Java EE 6 platform includes the following new features:

- Profiles: configurations of the Java EE platform targeted at specific classes of applications. Specifically, the Java EE 6 platform introduces a lightweight Web Profile targeted at next-generation web applications, as well as a Full Profile that contains all Java EE technologies and provides the full power of the Java EE 6 platform for enterprise applications.
- New technologies, including the following:
    - Java API for RESTful Web Services (JAX-RS)
    - Managed Beans
    - Contexts and Dependency Injection for the Java EE Platform (JSR 299), informally known as CDI
    - Dependency Injection for Java (JSR 330)
    - Bean Validation (JSR 303)
    - Java Authentication Service Provider Interface for Containers (JASPIC)
    - New features for Enterprise JavaBeans (EJB) components (see Enterprise JavaBeans Technology for details)
    - New features for servlets
    - New features for JavaServer Faces components

### 1.4.2 Brief Introduction to HTML5:

**What is HTML5?**

HTML5 is the newest hypertext markup language for websites from the World Wide Web Consortium (W3C). The first draft was made public in 2008, but not much happened until 2011. In 2011, HTML5 was released and people started writing about it and using it, but the support in different browsers was still poor. Today all major browsers (Chrome, Safari, Firefox, Opera, IE) offer HTML5 support, therefore the newest HTML technology can be used at its best today

HTML5 was created to make the coding process easier and more logical. You will see a bit later that many syntaxes are now deprecated and soon to be kicked out through the back door. The unique and impressive features HTML5 comes with are in the multimedia department. Many of the features it comes with have been created with the consideration that users should be able to run heavy content on low-powered devices. The syntactic features include the new <video>, <audio> and <canvas> elements, but also integration of vector graphics content (what we knew before as being the <object> tags). This means that multimedia and graphic content on the web will be handled and executed easier and faster, without the need of plugins or APIs.

Some of the new Tags Included are:.

- **<article>** – this tag defines an article, a user comment or a post, so an independent item of contents

- **<aside>** – the *aside* tag marks content aside from the page content, which for example could be a lateral sidebar

- **<header>**, **<footer>** – you won't need to manually name IDs for headers and footers, as now you have a pre-defined tag for them

- **<nav>** – the navigation can now be placed in the markup in between the *nav* tags, which will automatically make your lists act like navigation

- **<section>** – this is another important new syntax, as it can define any kind of sections in your document. It works pretty much like a *div* which separates different sections.

- **<audio>**, **<video>** – these two obviously mark sound or video content, which will now be easier to run by devices.

- **<embed>** – this new tag defines a container for interactive content (plugin) or external application

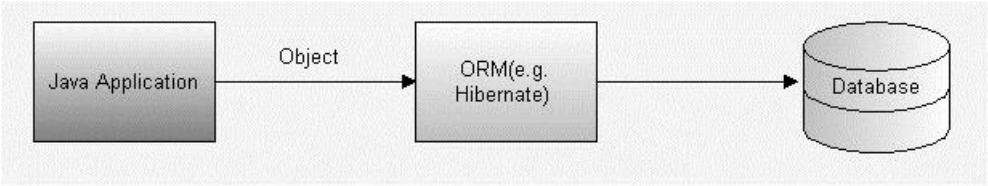
- **<canvas>** – the *canvas* tag is quite exciting, as it allows drawing graphics via scripting (mostly JavaScript, but some others can be employed as well)

### 1.4.3 Introduction about Hibernate:

Before understanding hibernate framework, we need to understand Object Relational Mapping(ORM).

**What is ORM?**

ORM is a programming method to map the objects in java with the relational entities in the database.In this,entities/classes refers to table in database,instance of classes refers to rows and attributes of instances of classes refers to column of table in database.This provides solutions to the problems arise while developing persistence applications using traditional JDBC method. This also reduces the code that needs to be written.




**Need for tools like hibernate:**

The main advantage of ORM like hibernate is that it shields developers from messy SQL. Apart from this, ORM provides following benefits:

**Improved productivity:**

- High-level object-oriented API
- Less Java code to write
- No SQL to write

**Improved performance:**

- Sophisticated caching
- Lazy loading
- Eager loading

**Improved maintainability:**

- A lot less code to write

**Improved portability:**

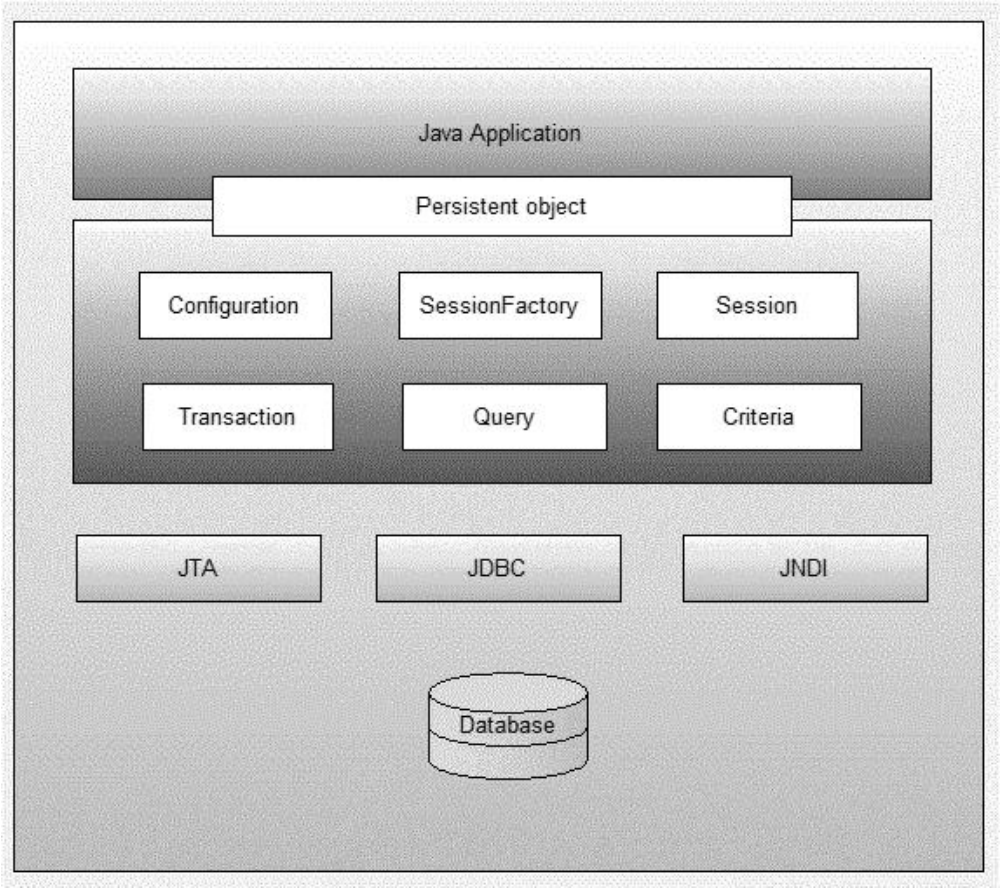
- ORM framework generates database-specific SQL for you

**What is hibernate?**

Hibernate is a pure Java object-relational mapping (ORM) and persistence framework that allows you to map plain old Java objects to relational database tables.The main goal of hibernate is to relieve the developer from the common data persistence related tasks.It maps the objects in the java with the tables in the database very efficiently and also you can get maximum using its data query and retrieval facilities.Mainly by using Hibernate in your projects you can save incredible time and effort.

**Architecture of hibernate :**

Following is a detailed view of the Hibernate Application Architecture with few important core classes.




The Hibernate architecture is layered to keep you isolated from having to know the underlying APIs.Hibernate is like a bridge between java application and relational database.

Core classes of hibernate are:

**Session Interface:**

This is the primary interface used by hibernate applications. The instances of this interface are lightweight and are inexpensive to create and destroy. Hibernate sessions are not thread safe.It allows you to create query objects to retrieve persistent objects.It wraps JDBC connection Factory for Transaction.It holds a mandatory (first-level) cache of persistent objects, used when navigating the object graph or looking up objects by identifier .

```
1. Session session=SessionFactory.openConnection();
```

**SessionFactory Interface :**

This is a factory that delivers the session objects to hibernate application.It is a heavy weighted object so generally there will be a single SessionFactory for the whole application and it will be shared among all the application threads.The SessionFactory caches generate SQL statements and other mapping metadata that Hibernate uses at runtime. It also holds cached data that has been read in one unit of work and may be reused in a future unit of work.

```
1. Configuration configuration=new Configuration();
2.   configuration.configure();
3.   ServiceRegistry sr= new ServiceRegistryBuilder().applySettings(configuration.getPr
     operties()).buildServiceRegistry();
4.   SessionFactory sf=configuration.buildSessionFactory(sr);
```

SessionFactory object is created with the help of configuration object.

**Configuration Interface :**

This is used to configure hibernate. It's also used to bootstrap hibernate. Mapping documents of hibernate are located using this interface.

**Transaction Interface :**

This is an optional interface but the above three interfaces are mandatory in each and every application. This interface abstracts the code from any kind of transaction implementations such as JDBC transaction, JTA transaction.

**Query and Criteria Interface :**

This interface allows the user to perform queries and also control the flow of the query execution.

### 1.4.4 Brief Introduction to MySQL and REST based API

**MySQL** is a relational database management system (RDBMS) that runs as a server providing multi-user access to a number of databases. Free-software projects that require a full-featured database management system often use MySQL. Such projects include (for example) Word Press, phpBB, Drupal and other software built on the LAMP software stack. MySQL is also used in many high-profiles, large-scale World Wide Web products including Wikipedia, Google and Face book.

**Uses**

Many web applications use MySQL as the database component of a LAMP software stack. Its popularity for use with web applications is closely tied to the popularity of PHP, which is often combined with MySQL. Several high-traffic web sites use MySQL for data storage and logging of user data.

**Platforms and interfaces**

MySQL code uses C and C++. The SQL parser uses yacc and a home-brewed lexer, sql_lex.cc. MySQL works on many different system platforms, including AIX, BSDi, FreeBSD, HP-UX, i5/OS, Linux, Android, Mac OS X, NetBSD, Novell NetWare, OpenBSD, Open Solaris, eComStation, OS/2 Warp, QNX, IRIX, Solaris, Symbian, SunOS, SCO OpenServer, SCO UnixWare, Sanos, Tru64 and Microsoft Windows. A port of MySQL to OpenVMS also exists.

MySQL is primarily an RDBMS and therefore ships with no GUI tools to administer MySQL databases or manage data contained within. Users may use the included command-line tools, or download MySQL Frontends from various parties that have developed desktop software and web applications to manage MySQL databases, build database structure, and work with data records.

All major programming languages with language-specific APIs include Libraries for accessing MySQL databases.

**SOAP and REST based API**

**SOAP (Simple Object Access Protocol)** and **REST (Representational State Transfer)** provide mechanisms for requesting information from endpoints (SOAP) or from resources (REST).

Perhaps the best way to think of these technologies is as a method of making a remote procedure calls against a well-defined API.

SOAP has a more formal definition mechanism called WSDL (Web Services Definition Language) and is a bit more complex to implement.

REST uses the standard HTTP request and response mechanism, simplifying implementation and providing for a looser coupling of the client and server. Note that REST also supports the transfer of non-XML messages such as JSON (JavaScript Object Notation).

**Representational State Transfer (REST) Based API**

**Representational State Transfer** (**REST**) is an architectural style that abstracts the architectural elements within a distributed hypermedia system. REST ignores the details of component implementation and protocol syntax in order to focus on the roles of components, the constraints upon their interaction with other components, and their interpretation of significant data elements. REST has emerged as a predominant web API design model.

REST-style architectures conventionally consist of clients and servers. Clients initiate requests to servers; servers process requests and return appropriate responses. Requests and responses are built around the transfer of representations of resources. A resource can essentially be any coherent and meaningful concept that may be addressed. A representation of a resource is typically a document that captures the current or intended state of a resource.

The client begins sending requests when it is ready to make the transition to a new state. While one or more requests are outstanding, the client is considered to be in transition. The representation of each application state contains links that may be used the next time the client chooses to initiate a new state-transition.

## 1.5 PROJECT PLANNING AND SCHEDULING

### 1.5.1 Project Development Approach And Justification

To solve actual problems in an industry setting, a software development strategy must be incorporated that encompasses the process, methods and tools for software engineering. This strategy is often referred to as software process model and software engineering paradigm. A software process model for software engineering is chosen based on the nature of project and application, the methods and tool to be used and the controls and deliverables that are required.

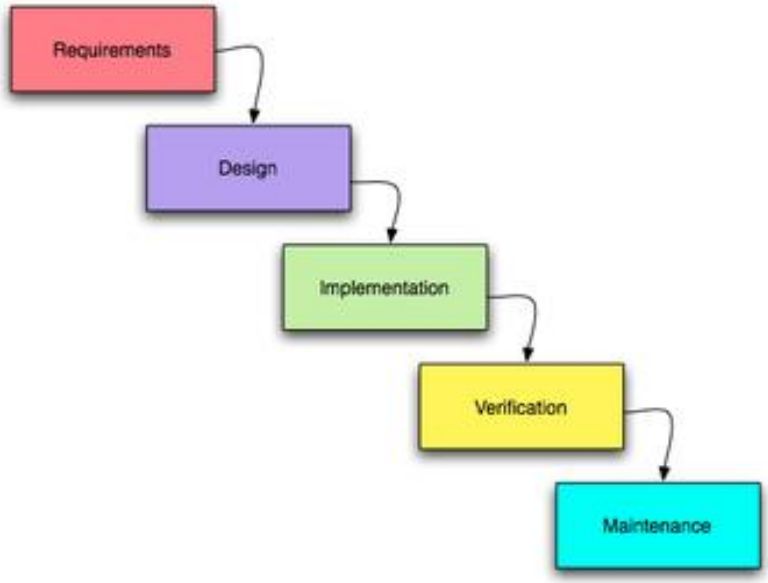
For the development and implementation of web based module several distinct approach are in practice. Among them, a very popular one is the classical system development life cycle model or the waterfall model. The waterfall model has following phase of its development:

1) System/Information Engineering and modeling
2) Software Requirement Analysis
3) System Analysis and Design
4) Code Generation
5) Testing and Maintenance

- **System Information Engineering and Modeling:**

As software is always of a large system (or business), work begins by establishing requirements for all system elements and then allocating some subset of these requirements to software. This system view is essential when software must interface with other elements such as hardware, people and other resources.

System is the basic and very critical requirement for the existence of software in any entity. So if the system is not in place, the system should be engineering and put in place. In some cases to extract the maximum output, system should be re-engineered and spices up.




In this approach I have gather the required data which could be helpful to me to develop new system. In the next phase of this model I have studied about its feasibleness. Weather the development is feasible by operational, technical and economical?

In the next phase whole system has been analyzed and topics are covered in this phase like – system requirement specification, class diagram, sequence diagram, component diagram, future of new system etc.

Next phase is system design- in this phase database design will take place then after immediately followed by GUI forms design. This will provide interactive interface with user.

After system design the next phase is system implementation. In this phase system will integrate with all modules and also implement as multiuser and single user environment.

After components are implemented then integration testing will perform. Also other testing methods will be applied like alpha testing, beta testing etc. and after whole system will tested.

Now system is ready but we need to ensure about maintenance and enhancement of newly developed system. This phase is generally starts after realize of the system. In the enhancement new user requirements will be taken and whole process will be repeated and new version will be delivered to user.

### 1.5.2 Project Plan including Milestones, Deliverables, Roles, Responsibilities and Dependencies

A plan is drawn up at the start of the project, should be used as the driver of the project. The project planning consists of:

- Selection of suitable software development process model which I have selected Interactive Water Fall Model.
- Risk Management Plan, which involves the risk identification and risk assessments.
- Project Scheduling, which involves the tasks and duration required for performing tasks. This is described by task representation and the Timeline chart representation.
- Cost and Effort estimation, which involves estimation of cost as well as effort applied by the developers.

♦ **Milestones and Deliverables**

Management needs information. As software is intangible, this information can only be provided as a document that describes the state of the software being developed. Without this information, it is impossible to judge progress and cost estiates and schedules cannot be updated.

♦ **Milestones:**

- Milestone is an end-point of the software process activity.
- At each milestone there should be formal output, such as report, that can be represented to the management.
- Milestone report need not be large document; they are the short report of achievements in software project activity.
- Milestone represents the end of the distinct, logical stage in the project.

♦ **Deliverables:**

- Deliverable is a project report that is delivered to customer.
- Deliverables are delivered to the customer at the end of the same major project phase such as specification, design, etc.

- Deliverables are usually milestones.
- Milestones may be internal project results that are used by the project manager to check progress but which are not delivered to the customer.

- **Role and Responsibility:**

In my project main entities are the administrator, Parents, Doctor, Blog Writers, Nanny, Sellers and Children. Each entity has different roles and responsibilities. Each entity performs its role very carefully to maintain the system.

- The administrator has the role to decide whether to allow members to perform their activity or not. Administrator can do other site management task.
- Thus administrator is the person who is responsible for whole management of the organization.
- The Parents is the entity who is using the application. Parents are responsible for adding children details, its vaccination, etc. Parents can read blog post or start their discussion in forum for query. Parents can buy products & make payment through PayPal account. Parents can hire Babysitter.
- Doctors play the key role for 24 x 7 chatting service
- Child can play online games.

### 1.5.3 Schedule Representation

This topic will cover the whole schedule of developments of this system. This schedule contains the history of the topics which are cover date by date. Table 1.1 shows the project scheduling.

| Sr. No. | Topics | Date |
|---|---|---|
| 1 | Re Registration on PMMS | 18/ 02/ 2016 |
| 2 | Enter Details of Project in PMMS | 18/ 02/ 2016 |
| 3 | Business Modal Canvas Uploading Activity in PMMS System | 25/ 03/ 2016 |
| 4 | PDE Exercise on PMMS | 03/ 04/ 2016 |
| 5 | Designing of Admin Side & User Side | 20/ 01/ 2016 to 18/ 02/ 2016 |
| 6 | Coding of Backend for Admin Side | 20/ 02/ 2016 to 05/ 03/ 2016 |
| 7 | Coding of Frontend for Admin Side | 06/ 03/ 2016 to 20/ 02/ 2016 |
| 8 | Coding of User Interface | 22/ 03/ 2016 to 18/ 04/ 2016 |
| 9 | Testing | 19/ 04/2016 |

**Table 1.1 Project Scheduling**

# 2. SYSTEM ANALYSIS AND DESIGN

## 2.1 STUDY OF CURRENT SYSTEM

- In current online system there is a only facility of buying products online & add to wish list for future purpose nothing more than that
- Blog related to baby & mother care are only written articles so to read that it is boring task some times.
- There is no proper facility of discussion forum for this purpose
- All the task have different online application like (Buying baby care products, online children games, hire baby sitter, guide to perinatal care etc.)
- In current offline system new parents take suggestions of other ladies & elder women of family but it is not good in some case and generation gap can cause problem,
- There is no online system which have counselling of parents online and vaccination alert.

## 2.2 PROBLEM & WEAKNESSES OF CURRENT SYSTEM

To overcome following drawbacks of current system new system Kalarav is introduce:

- Current online system have some limitations like user have to select all item at all time for buying that products. It is not much reliable.
- Blog can’t guide through media only written articles is there. Discussion forums are not widely used for this purpose.
- No proper awareness of perinatal care. No online counselling system is there for new parents. They have to visit doctor and it time consuming & costly.
- No such website for entertainment of child & E – Kinder Garten
- There is no online system for storing sharing of memories through photo diary

## 2.3 REQUIREMENT OF NEW SYSTEM

"Kalarav – The Step Toward Baby Care" is the application through which user can make his/her profile and admin can keep information about user.

To provide ease of searching and reading facility for guide related perinatal care "Kalarav – The Step Toward Baby Care" project is basically design. So it is design for helping a society via noble costs.

This website have various module for what precautions should be made during pregnancy? , how to take care of new born baby, to buy best quality baby care product & to find helping hand for parents.

One can easily login to get any kind of information discussed above. Here the user is also facilitated with blog by which parents can know various things & discussion forum by which parents can solve any type of query by discussion.

The main thing is here Baby care product store have a new facility as all know general requirements for product related to baby care are diapers, food etc. so when one time user buy such there is option for buying it periodically i.e. it send directly to users home next time no need of buying second time and perform all task again & again.

Here there is an also facility of online games for child of age 5 to 10 & for small children there is a facility of E – Kindergarten

The main goal is to provide the best suggestion & care options to parents of new born baby or we can say that application helps new parents. Parents can take counselling also from online counselor. Application have a good team of writers for blog which writes various articles on Food, Diet, Baby Care, Mother Care etc.

## 2.4 FUNCTIONS OF SYSTEM

### 2.4.1 Use Cases

A use case diagram captures the actors and the role they perform in a system. It depicts the roles performed by each actor. The five actors for this project are *parents, Hospital staff, child, guest, and Admin.*

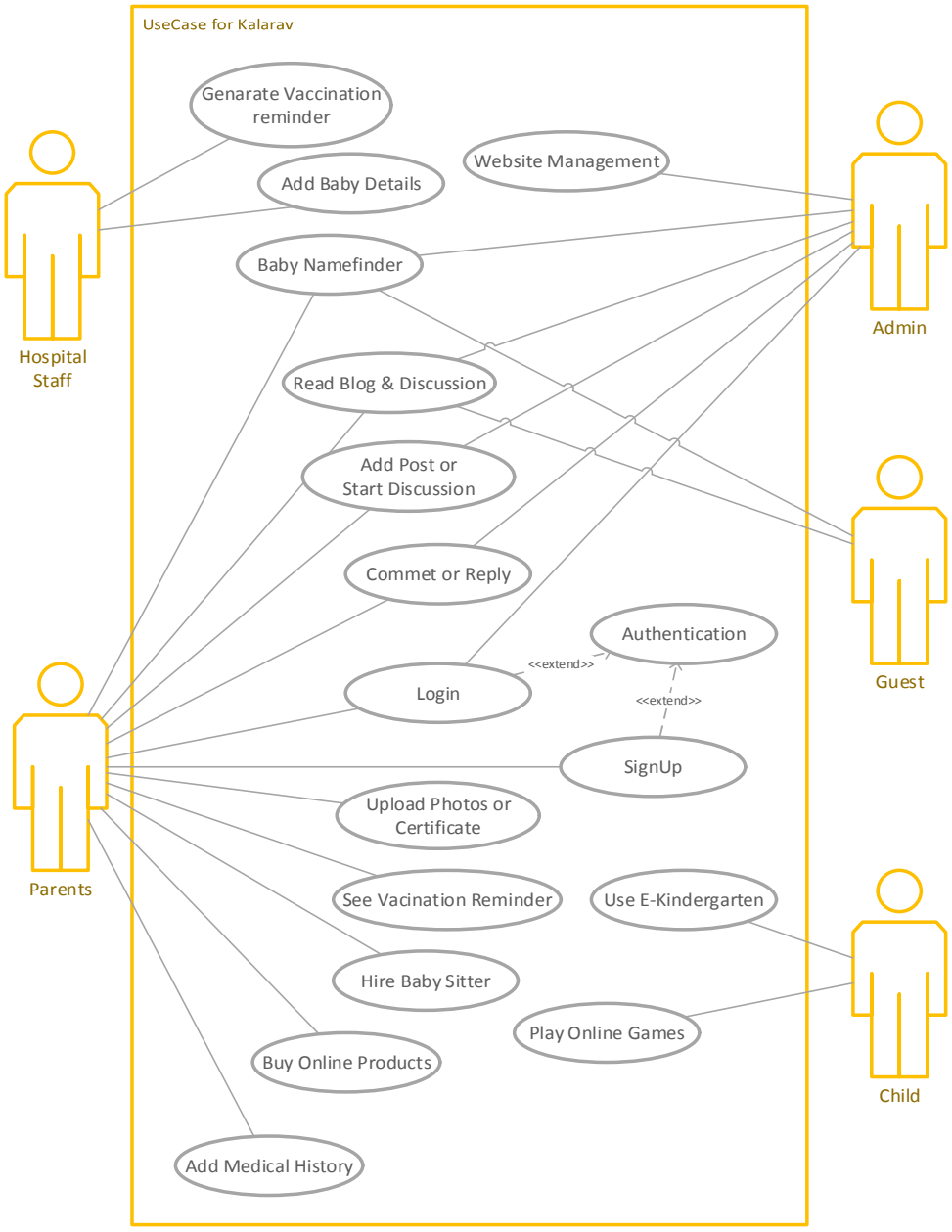



**Figure 2.1 Use Case Diagram**

## 2.5 DATA MODELING

### 2.5.1 Class Diagram

The class diagram below represents the important classes implemented for the application with their operations and return types. The diagram also shows how each class is associated with other classes in the system.

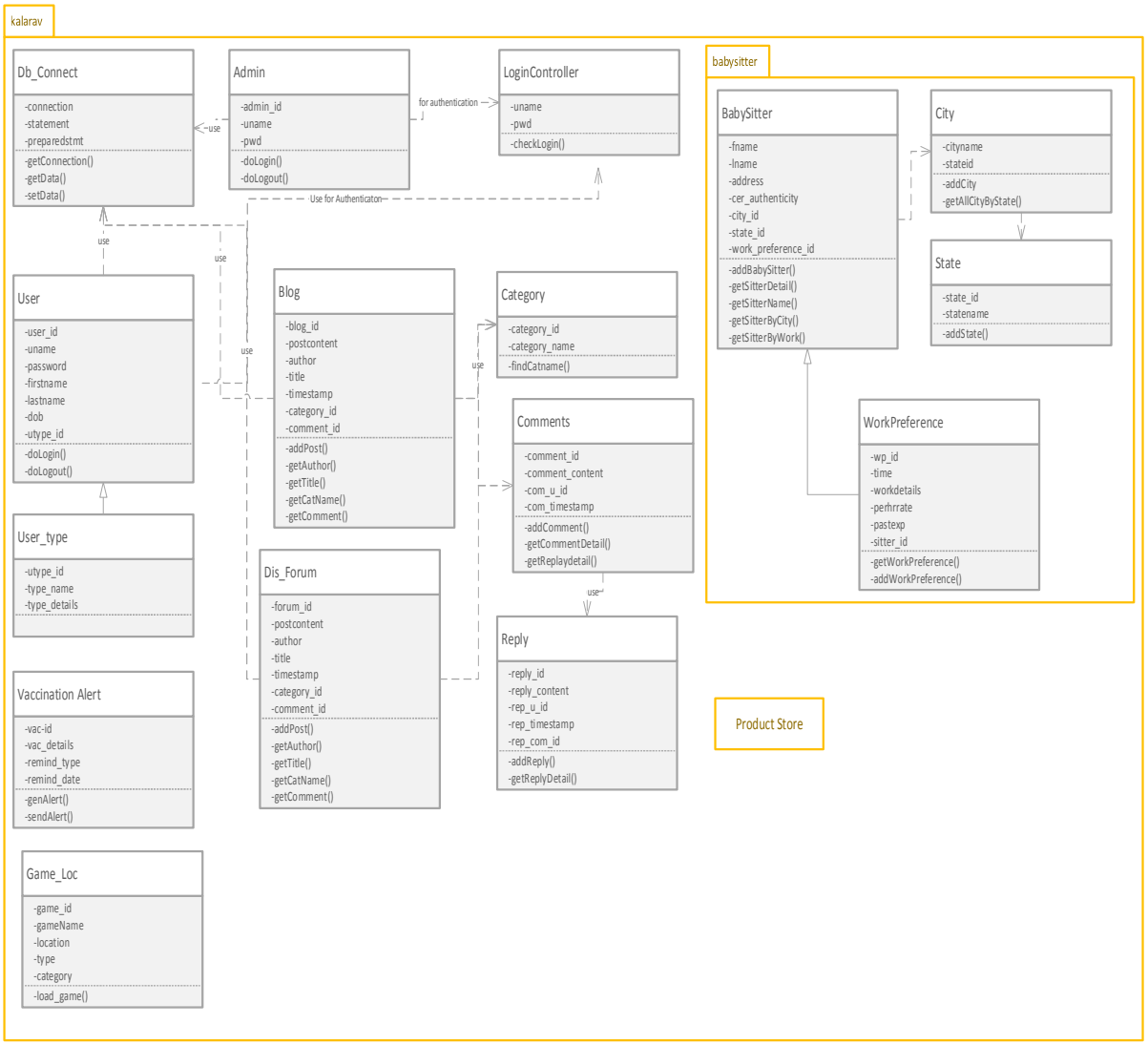



**Figure 2.2 Class Diagram**

### 2.5.2 Activity Diagram

The Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency.

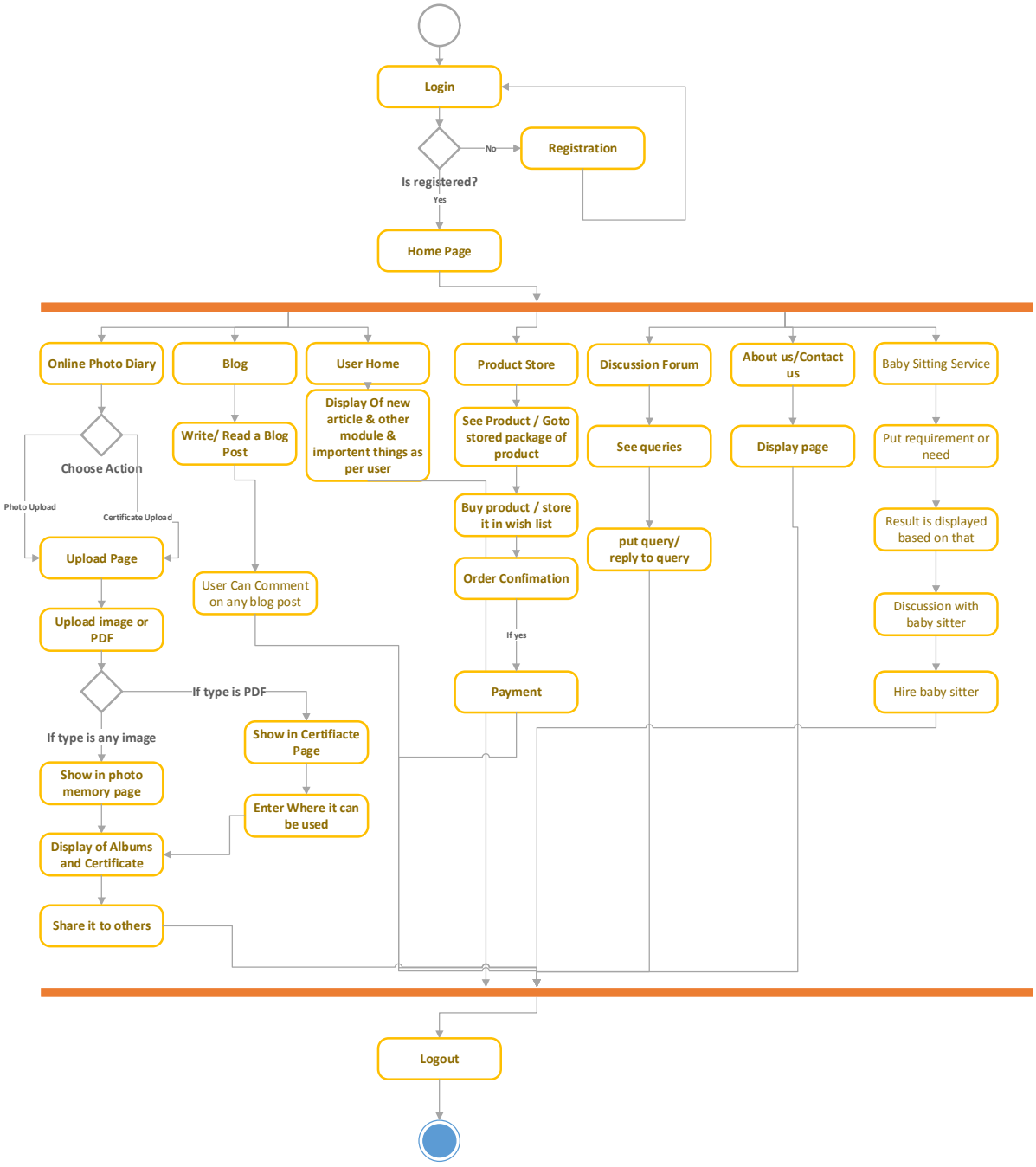



**Figure 2.3 Activity Diagram**

### 2.5.3 Data Dictionary

**Admin (Table – 2.1)**

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | admin_id | int(8) | | | No | None | AUTO_INCREMENT |
| 2 | ad_uname | varchar(50) | utf8_general_ci | | No | None | |
| 3 | ad_email | varchar(200) | utf8_general_ci | | No | None | |
| 4 | ad_pwd | varchar(20) | utf8_general_ci | | No | None | |
| 5 | ad_type | varchar(10) | utf8_general_ci | | No | None | |
| 6 | ad_date_created | timestamp | | | No | CURRENT_TIMESTAMP | |

**Album (Table – 2.2)**

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | album_id | int(8) | | | No | None | AUTO_INCREMENT |
| 2 | album_title | varchar(150) | utf8_general_ci | | No | None | |
| 3 | album_user_id | int(8) | | | Yes | NULL | |
| 4 | album_create_date | timestamp | | | No | CURRENT_TIMESTAMP | |
| 5 | album_share | varchar(1) | utf8_general_ci | | No | None | |

**Blog_post (Table – 2.3)**

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | post_id | int(8) | | | No | None | AUTO_INCREMENT |
| 2 | post_title | varchar(300) | utf8_general_ci | | No | None | |
| 3 | post_content | longtext | utf8_general_ci | | No | None | |
| 4 | post_author_id | int(11) | | | No | None | |
| 5 | post_timestamp | timestamp | | | No | CURRENT_TIMESTAMP | |
| 6 | post_useful_count | int(8) | | | No | None | |
| 7 | category_id | int(8) | | | No | None | |
| 8 | media_json | varchar(1000) | utf8_general_ci | | Yes | NULL | |
| 9 | post_status | varchar(1) | utf8_general_ci | | No | None | |

**Category (Table – 2.4)**

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | category_id | int(5) | | | No | None | AUTO_INCREMENT |
| 2 | category_name | varchar(50) | utf8_general_ci | | No | None | |
| 3 | category_type | varchar(15) | utf8_general_ci | | No | None | |

## Child (Table – 2.5)

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | child_id | int(8) | | | No | None | AUTO_INCREMENT |
| 2 | parent_id | int(8) | | | Yes | NULL | |
| 3 | child_name | varchar(50) | utf8_general_ci | | No | None | |
| 4 | child_school | varchar(100) | utf8_general_ci | | Yes | NULL | |
| 5 | child_hospital | varchar(100) | utf8_general_ci | | Yes | NULL | |
| 6 | child_dob | date | | | No | None | |

## Comment (Table – 2.6)

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | comment_id | bigint(255) | | | No | None | AUTO_INCREMENT |
| 2 | com_user_id | int(8) | | | Yes | NULL | |
| 3 | com_content | varchar(500) | utf8_general_ci | | No | None | |
| 4 | comment_type | varchar(20) | utf8_general_ci | | No | None | |
| 5 | com_timestamp | timestamp | | on update CURRENT_TIMESTAMP | No | CURRENT_TIMESTAMP | ON UPDATE CURRENT_TIMESTAMP |
| 6 | com_parent_id | int(8) | | | No | None | |

## Forum (Table – 2.7)

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | forum_id | int(8) | | | No | None | AUTO_INCREMENT |
| 2 | forum_query | varchar(300) | utf8_general_ci | | No | None | |
| 3 | forum_user_id | int(8) | | | Yes | NULL | |
| 4 | forum_media_json | varchar(1000) | utf8_general_ci | | Yes | NULL | |
| 5 | fourm_timestamp | timestamp | | on update CURRENT_TIMESTAMP | No | CURRENT_TIMESTAMP | ON UPDATE CURRENT_TIMESTAMP |
| 6 | query_same_count | int(8) | | | No | None | |
| 7 | forum_status | varchar(1) | utf8_general_ci | | No | None | |

## Media (Table – 2.8)

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | media_id | int(12) | | | No | None | AUTO_INCREMENT |
| 2 | media_name | varchar(100) | utf8_general_ci | | No | None | |
| 3 | media_type | varchar(20) | utf8_general_ci | | No | None | |
| 4 | media_parent_id | int(8) | | | Yes | NULL | |
| 5 | media_user_id | int(8) | | | No | None | |

## Photos (Table – 2.9)

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | photo_id | bigint(14) | | | No | None | AUTO_INCREMENT |
| 2 | photo_location | varchar(200) | utf8_general_ci | | No | None | |
| 3 | photo_share | varchar(1) | utf8_general_ci | | No | None | |
| 4 | photo_user_id | int(8) | | | Yes | NULL | |
| 5 | photo_like | int(8) | | | No | None | |
| 6 | photo_visiblity | varchar(1) | utf8_general_ci | | No | None | |

## Product (Table – 2.10)

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | prod_id | int(8) | | | No | None | AUTO_INCREMENT |
| 2 | prod_name | varchar(250) | utf8_general_ci | | No | None | |
| 3 | prod_price | decimal(4,2) | | | No | None | |
| 4 | prod_category_id | int(8) | | | No | None | |
| 5 | prod_rating | int(8) | | | No | None | |
| 6 | prod_dist_id | int(8) | | | No | None | |
| 7 | prod_seller_id | int(8) | | | No | None | |
| 8 | prod_media_json | varchar(1000) | utf8_general_ci | | No | None | |
| 9 | prod_coupon_code | varchar(10) | utf8_general_ci | | No | None | |
| 10 | prod_quantity | int(4) | | | No | None | |

## Reply (Table – 2.11)

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | reply_id | int(8) | | | No | None | AUTO_INCREMENT |
| 2 | reply_content | longtext | utf8_general_ci | | No | None | |
| 3 | reply_user_id | int(8) | | | No | None | |
| 4 | reply_query_id | int(8) | | | No | None | |
| 5 | reply_media_json | varchar(1000) | utf8_general_ci | | Yes | NULL | |
| 6 | reply_timestamp | timestamp | | on update CURRENT_TIMESTAMP | No | CURRENT_TIMESTAMP | ON UPDATE CURRENT_TIMESTAMP |
| 7 | reply_useful_count | int(8) | | | No | None | |

## Seller (Table – 2.12)

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | seller_id | int(8) | | | No | None | AUTO_INCREMENT |
| 2 | seller_name | varchar(100) | utf8_general_ci | | No | None | |
| 3 | seller_contact | varchar(12) | utf8_general_ci | | No | None | |
| 4 | seller_address | varchar(300) | utf8_general_ci | | No | None | |
| 5 | seller_email | varchar(100) | utf8_general_ci | | No | None | |

## State (Table – 2.13)

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | state_id | int(8) | | | No | None | AUTO_INCREMENT |
| 2 | state_name | varchar(50) | utf8_general_ci | | No | None | |

## User (Table – 2.14)

| # | Name | Type | Collation | Attributes | Null | Default | Extra |
|---|---|---|---|---|---|---|---|
| 1 | user_id | int(8) | | | No | None | AUTO_INCREMENT |
| 2 | user_fname | varchar(50) | utf8_general_ci | | No | None | |
| 3 | user_lname | varchar(50) | utf8_general_ci | | No | None | |
| 4 | user_uname | varchar(50) | utf8_general_ci | | No | None | |
| 5 | user_email | varchar(200) | utf8_general_ci | | No | None | |
| 6 | user_pwd | varchar(2000) | utf8_general_ci | | No | None | |
| 7 | user_dob | date | | | No | None | |
| 8 | user_type | varchar(20) | utf8_general_ci | | No | None | |
| 9 | user_media_id | int(8) | | | No | None | |
| 10 | user_contact | varchar(12) | utf8_general_ci | | No | None | |
| 11 | user_addr | varchar(500) | utf8_general_ci | | No | None | |
| 12 | pincode | varchar(6) | utf8_general_ci | | No | None | |
| 13 | user_city | varchar(30) | utf8_general_ci | | No | None | |
| 14 | user_state_id | int(8) | | | No | None | |
| 15 | user_status | varchar(1) | utf8_general_ci | | No | None | |

## 2.6 FUCTIONAL AND BEHAVIORAL MODELING

### 2.6.1 Sequence Diagram

A sequence diagram is a kind of interaction diagram that shows how processes operate with one another and in what order. It is a construct of a Message Sequence Chart. A sequence diagram shows object interactions arranged in time sequence.

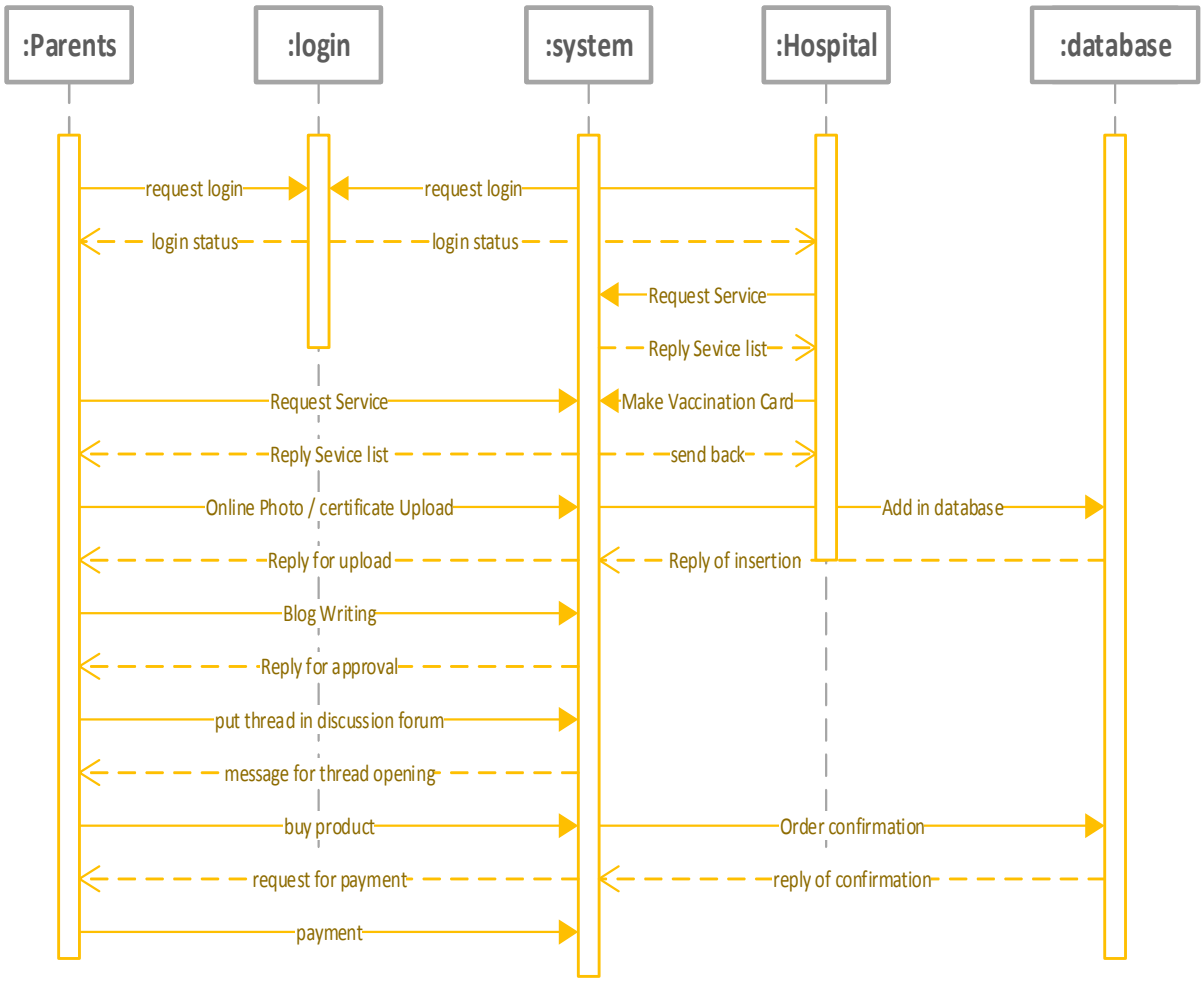



**Figure 2.4 Sequence Diagram**

### 2.6.2 Data Flow Diagram

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system, modeling its process aspects. Often they are a preliminary step used to create an overview of the system which can later be elaborated. DFDs can also be used for the visualization of data processing (structured design).

- **Data Flow Diagram – Level 0**

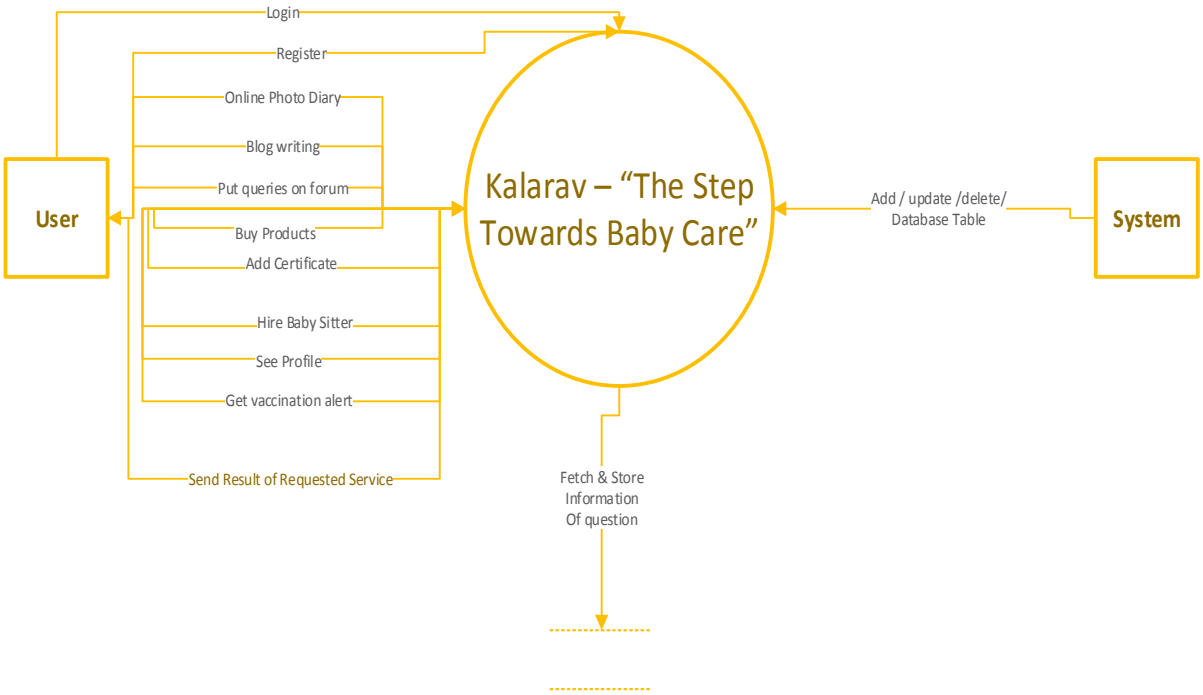



**Figure 2.5 DFD Level 0 Diagram**

- **Data Flow Diagram – Level 1**

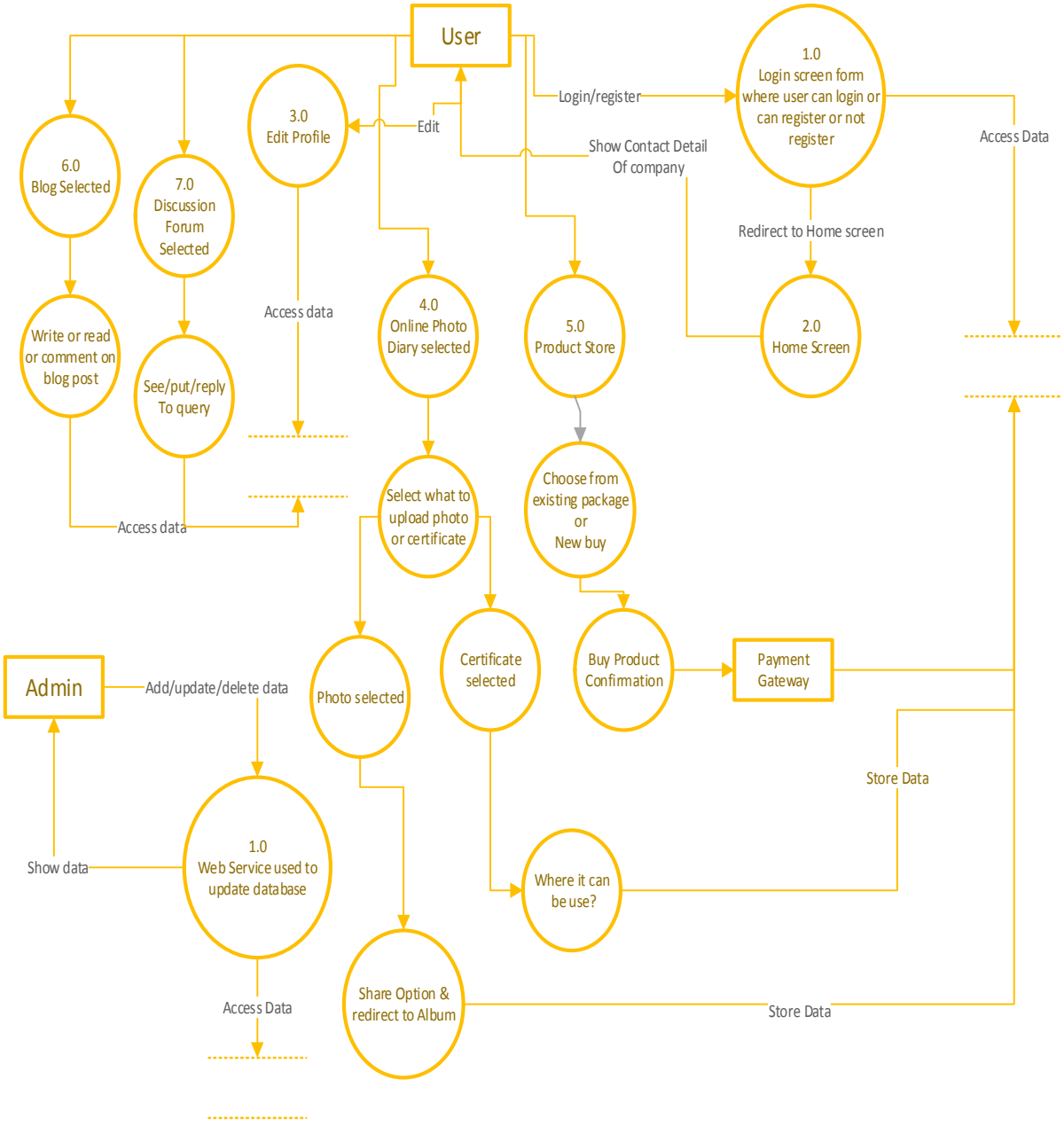
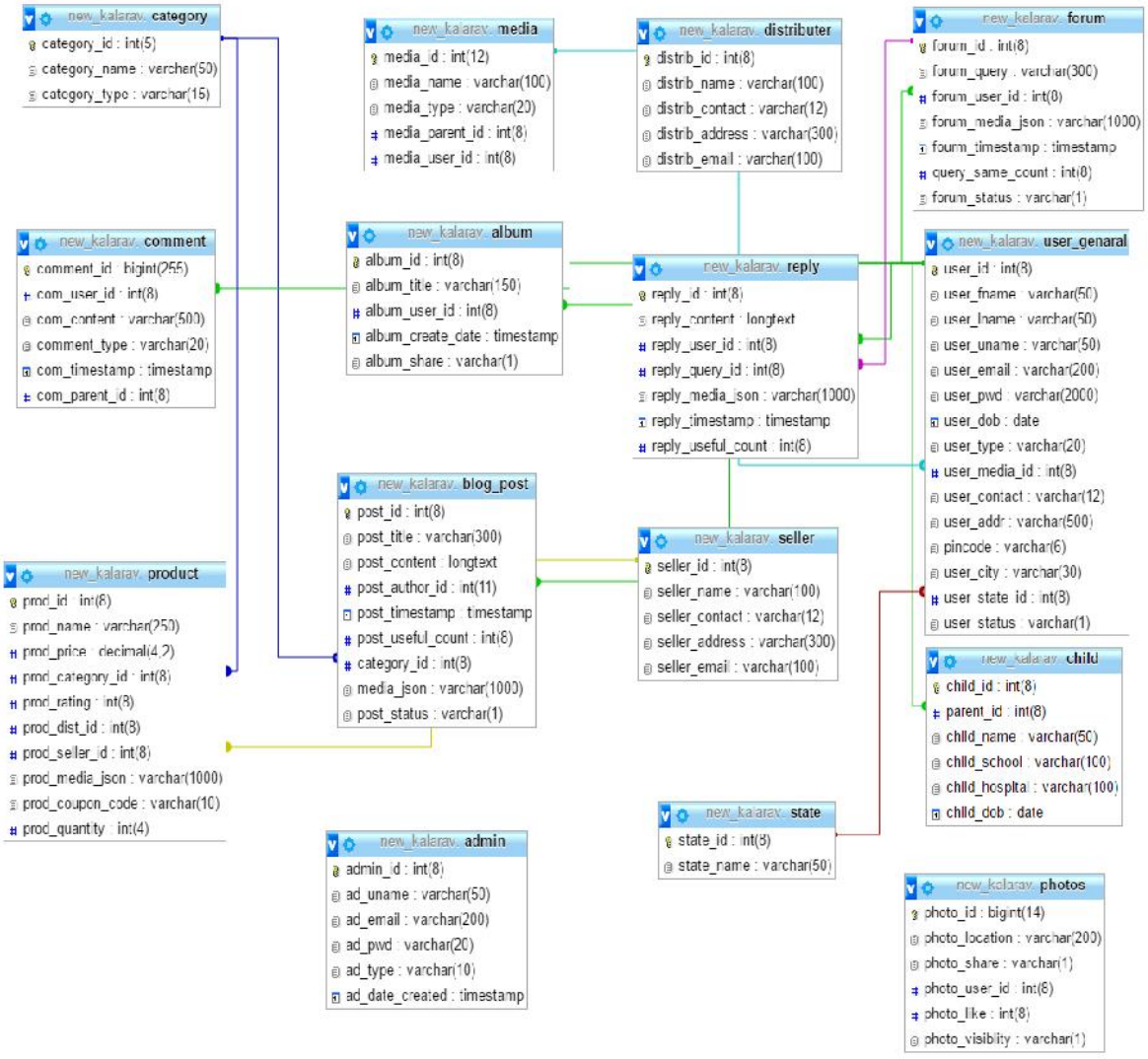



**Figure 2.6 DFD Level 1 Diagram**

## 2.7 DATABASE DESIGN

- **Tables and Relationship**



# 3. IMPLEMENTATION

## 3.1 SAMPLE CODES

- **User Interface**
  - **Code For Login**

**1. Front End**

```
<div class="overlaylogin">
        <a href="javascript:void(0)" id="login-close" class="overlay-close">X</a>
                <div class="col-md-6 log">
                        <h3>Login</h3>
                        <p>Welcome, please enter the following to continue.</p>
                        <form role="form" id="loginform">
                                <div class="form-group">
                                        <h5>User Name:<span style="color:red;">   *
                                        </span></h5>
                                        <input class="form-control" type="text" value=""
                                        autofocus name="uname" id="uname" placeholder="Enter
                                        Your UserName">
                                        <span id="erruname" style="display:none;color:red;" >
                                                User Name is Required.</span>
                                </div>
                                <div class="form-group">
                                        <h5>Password:<span style="color:red;">   *
                                        </span></h5>
                                        <input type="password" class="form-control" name="pwd"
                                        id="pwd" placeholder="Enter Your Password" >
                                        <span id="errpwd" style="display:none;color:red;" >
                                                Password is Required.</span>
                                </div>
                                <div class="form-group">
                                        <h5>Remember Me:
                                        <input style="margin-left:3%;" type="checkbox"
                                                name="saveme" id="saveme" >
                                        </h5>
                                </div>
                                <input type="submit" id="login" value="Login">
                        </form>
                        <a href="#">Forgot Password ?</a>
                </div>
```

```
<div class="col-md-6 login-right">
	<h3>New Registration</h3>
	<p>By creating an account with our website, you will be able to
	access all our features & services faster, e.g. online photo diary,
	One click buy, Write an article etc.
	</p>
	<div id="register-btns">
		<a href="javascript:void(0)" style="float:left;margin-
		bottom:10px;" id="register-parent">Register As Parent</a>

		<a href="javascript:void(0)" style="float:right;margin-
		bottom:10px;" id="register-child"> Register As Child</a>

		<a href="javascript:void(0)" style="float:left;margin-
		bottom:10px;" id="register-author"> Register As Blog Writer</a>

		<a href="javascript:void(0)" style="float:right;margin-
		bottom:10px;" id="register-seller">Register As Seller</a>
		<br /><br />

		<a href="javascript:void(0)" style="float:left;margin-
		bottom:10px;" id="register-nany">Register As Nany</a>

		<a href="javascript:void(0)" style="float:right;margin-
		bottom:10px;" id="register-doctor">Register As Doctor</a>
	</div>
</div>
<div class="clearfix"></div>
</div>
<script type=”text/javascript”>
	$("#loginform").submit(function(event){
	if($(this).find("div.has-error").length == 0){
	$.post('../doUserLogin',$("#loginform").serialize(),function(jsonResponse) {
		if(jsonResponse['errmsg'] != null)
		alert("Login Fail: UserName or Password is Wrong.");
		if(jsonResponse['success'] != null)
			window.location.href = "index.jsp";
	});
	}
	else{
		return false;
	}
	event.preventDefault();
	});
```

```
	$("#uname").blur(function(){
	if($("#uname").val() == ""){
		$("#uname").parent().addClass("has-error");
		$("#erruname").css("display","block");
	}
	else{
		$("#uname").parent().removeClass("has-error");
		$("#erruname").css("display","none");
	}
	});

	$("#pwd").blur(function(){
	if($("#pwd").val() == ""){
		$("#pwd").parent().addClass("has-error");
		$("#errpwd").css("display","block");
	}
	else{
		$("#pwd").parent().removeClass("has-error");
		$("#erruname").css("display","none");
	}
	});
</script>
```

**2. Controller**

```
package kalarav_controller;
import java.io.IOException;
import java.io.PrintWriter;
import org.json.simple.JSONObject;

import javax.servlet.ServletException;
import javax.servlet.http.Cookie;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

import kalarav_model.User_Genaral;
import kalarav_service.User_Genaral_Service;

public class LoginController_User extends HttpServlet{
/**
 *
 */
private static final long serialVersionUID = 5602103273707324660L;
```

```
public void doPost(HttpServletRequest request,HttpServletResponse response) throws
ServletException,IOException{
        HttpSession session = request.getSession();
        PrintWriter out = response.getWriter();
        try {
                User_Genaral_Service userService = new User_Genaral_Service();
                JSONObject jsonobj = new JSONObject();
                User_Genaral user;
                String uname="",pwd="",remember="",captcha="";

                if(request.getParameter("uname") != null &&request.getParameter("pwd")
        != null){
                        uname = request.getParameter("uname");
                        pwd = request.getParameter("pwd");

                        if(request.getParameter("saveme") != null)
                                remember = request.getParameter("saveme");

                    if(remember.equals("1")){
                                //with cookie
                                user = userService.doLogin(uname,pwd);

                                if(user != null){

                                session.setAttribute("loggedinuser",user);
                                Cookie username = new Cookie("uname",uname);
                                Cookie password = new Cookie("pwd",pwd);
                                username.setMaxAge(10*24*3600);
                                password.setMaxAge(10*24*3600);
                                response.addCookie(username);
                                response.addCookie(password);
                                jsonobj.put("success","Login Successful");

                                response.setContentType("application/json");
                                response.getWriter().write(jsonobj.toString());
                                }
                                else{
                                        jsonobj.put("errmsg","Username or
                                        Password is Wrong");


                                    response.setContentType("application/json");
                                    response.getWriter().write(jsonobj.toString());
                                }
                            }
                            else{
```

```
                                        //with out cookie
                                        user = userService.doLogin(uname,pwd);
                                        if(user != null){
                                        session.setAttribute("loggedinuser",user);
                                        jsonobj.put("success","Login Successful");
                                        response.setContentType("application/json");
                                        response.getWriter().write(jsonobj.toString());
                                }
                                else{
                                        jsonobj.put("errmsg","UserName or Password is
                                        Wrong");
                                        response.setContentType("application/json");
                                        response.getWriter().write(jsonobj.toString());
                                }
                        }
                }
                else{
                        jsonobj.put("errmsg","UserNAme or Password should not be
                        blanked.");
                        response.setContentType("application/json");
                        response.getWriter().write(jsonobj.toString());
                }
        }
        catch(Exception e){
                out.println(e);
                e.printStackTrace(out);
        }
}

public void doGet(HttpServletRequest request,HttpServletResponse response) throws
ServletException,IOException{
        HttpSession session = request.getSession();
        PrintWriter out = response.getWriter();
        JSONObject jsonobj = new JSONObject();
        try {
                User_Genaral_Service userService = new User_Genaral_Service();
                String uname="",pwd="";
                uname = request.getParameter("uname");
                pwd = request.getParameter("pwd");
                User_Genaral user = userService.doLogin(uname,pwd);

                if(user != null){
                        session.setAttribute("loggedinuser",user);
                        Cookie username = new Cookie("uname",uname);
                        Cookie password = new Cookie("pwd",pwd);
                        username.setMaxAge(10*24*3600);
```

```
                        password.setMaxAge(10*24*3600);
                        response.addCookie(username);
                        response.addCookie(password);
                        response.sendRedirect("kalarav/parent_home.jsp");
                    }
                    else{
                        jsonobj.put("errmsg","UserName or Password is Wrong");
                        response.setContentType("application/json");
                        response.getWriter().write(jsonobj.toString());
                        System.out.println("get");
                    }
                }
                catch(Exception e){
                    out.println(e);
                    e.printStackTrace(out);
                }
        }
}
```

### 3. Service File

```
package kalarav_service;

import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.*;

import kalarav_model.Media;
import kalarav_model.State;
import kalarav_model.User_Genaral;
import common.db_connect;

public class User_Genaral_Service {
        db_connect dbc = null;
        ResultSet rsuser = null;
        String query="";
        List<User_Genaral> userList;
        User_Genaral user;
        Media media;
        State state;
        State_Service stateService;
        Media_Service mediaService;

        public User_Genaral_Service(){
            try{
                dbc = new db_connect();
```

```
                }
                catch(Exception e){
                        System.out.println(e);
                }
        }

        public User_Genaral doLogin(String uname,String password) throws SQLException{
                query="select user_id,user_uname,user_email from user_genaral where
                user_uname = '"+uname+"' "  + "and user_pwd = '"+password+"'";
                rsuser = dbc.getData(query);
                if(rsuser.next()){
                        return new  User_Genaral (rsuser.getInt("user_id"),
                        rsuser.getString("user_uname"),rsuser.getString("user_email"));
                }
                else{
                        return null;
                }
        }
        ….
}
```

**4. Model File**

```
package kalarav_model;

public class User_Genaral {
        private int user_id;
        private String fname;
        private String lname;
        private String uname;
        private String email;
        private String pwd;
        private String dob;
        private String type;
        private Media profile_pic;
        private String contact;
        private String address;
        private String city;
        private State state;
        private String pincode;
        private String user_status;

        private String fullname;

        public User_Genaral(){
        }
```

```
public User_Genaral(int user_id,String uname,String email){
        this.user_id = user_id;
        this.uname = uname;
        this.email = email;
}

public User_Genaral(int user_id, String fullname, String uname, String email,
                String dob, String type, String contact, String user_status) {
        this.user_id = user_id;
        this.fullname = fullname;
        this.uname = uname;
        this.email = email;
        this.dob = dob;
        this.type = type;
        this.contact = contact;
        this.user_status = user_status;
}

public User_Genaral(int user_id, String fname, String lname, String uname,
                String email, String pwd, String dob, String type,
                Media profile_pic, String contact, String address, String city,
                State state, String user_status) {
        this.user_id = user_id;
        this.fname = fname;
        this.lname = lname;
        this.uname = uname;
        this.email = email;
        this.pwd = pwd;
        this.dob = dob;
        this.type = type;
        this.profile_pic = profile_pic;
        this.contact = contact;
        this.address = address;
        this.city = city;
        this.state = state;
        this.user_status = user_status;
}
/**
 * @return the user_id
 */
public int getUser_id() {
        return user_id;
}
/**
 * @param user_id the user_id to set
```

```
 */
public void setUser_id(int user_id) {
	this.user_id = user_id;
}
/**
 * @return the fname
 */
public String getFname() {
	return fname;
}
/**
 * @param fname the fname to set
 */
public void setFname(String fname) {
	this.fname = fname;
}
/**
 * @return the lname
 */
public String getLname() {
	return lname;
}
/**
 * @param lname the lname to set
 */
public void setLname(String lname) {
	this.lname = lname;
}
/**
 * @return the uname
 */
public String getUname() {
	return uname;
}
/**
 * @param uname the uname to set
 */
public void setUname(String uname) {
	this.uname = uname;
}
/**
 * @return the email
 */
public String getEmail() {
	return email;
}
```

```
/**
 * @param email the email to set
 */
public void setEmail(String email) {
	this.email = email;
}
/**
 * @return the pwd
 */
public String getPwd() {
	return pwd;
}
/**
 * @param pwd the pwd to set
 */
public void setPwd(String pwd) {
	this.pwd = pwd;
}
/**
 * @return the dob
 */
public String getDob() {
	return dob;
}
/**
 * @param dob the dob to set
 */
public void setDob(String dob) {
	this.dob = dob;
}
/**
 * @return the type
 */
public String getType() {
	return type;
}
/**
 * @param type the type to set
 */
public void setType(String type) {
	this.type = type;
}

/**
 * @return the profile_pic
 */
```

```
public Media getProfile_pic() {
        return profile_pic;
}
/**
 * @param profile_pic the profile_pic to set
 */
public void setProfile_pic(Media profile_pic) {
        this.profile_pic = profile_pic;
}
/**
 * @return the contact
 */
public String getContact() {
        return contact;
}
/**
 * @param contact the contact to set
 */
public void setContact(String contact) {
        this.contact = contact;
}
/**
 * @return the address
 */
public String getAddress() {
        return address;
}
/**
 * @param address the address to set
 */
public void setAddress(String address) {
        this.address = address;
}
/**
 * @return the city
 */
public String getCity() {
        return city;
}
/**
 * @param city the city to set
 */
public void setCity(String city) {
        this.city = city;
}
/**
```

```
	 * @return the state
	 */
	public State getState() {
		return state;
	}
	/**
	 * @param state the state to set
	 */
	public void setState(State state) {
		this.state = state;
	}
	/**
	 * @return the user_status
	 */
	public String getUser_status() {
		return user_status;
	}
	/**
	 * @param user_status the user_status to set
	 */
	public void setUser_status(String user_status) {
		this.user_status = user_status;
	}

	public String getFullname() {
		return fullname;
	}

	public void setFullname(String fullname) {
		this.fullname = fullname;
	}

	public String getPincode() {
		return pincode;
	}

	public void setPincode(String pincode) {
		this.pincode = pincode;
	}
}
```

**5. DB_Connect File**

```
package common;
import java.sql.*;
```

```
public class db_connect{
	static Connection con = null;
	static Statement s = null;

	public db_connect() throws SQLException,ClassNotFoundException{
		if(con == null){
			Class.forName("com.mysql.jdbc.Driver");
			con = DriverManager.getConnection
			("jdbc:mysql://localhost:3306/new_kalarav","root","root");
			s = con.createStatement();
		}
		else{
			getConnection();
		}
	}

	public static Connection getConnection() throws SQLException,
	ClassNotFoundException{
		s = getStatement(con);
		return con;
	}

	public static Statement getStatement(Connection con) throws SQLException,
	ClassNotFoundException{
		return con.createStatement();
	}

	public int setData(String query) throws SQLException{
		return s.executeUpdate(query);
	}

	public ResultSet getData(String query) throws SQLException{
		return s.executeQuery(query);
	}

	public void close() throws SQLException{
		con.close();
		s.close();
	}
}
```

- **Admin Interface**
  - **Code For User View**

**1. Front End**

```
<%@page import="kalarav_service.User_Genaral_Service"%>
<%@page import="kalarav_model.User_Genaral"%>
<%@page import="java.util.List"%>
<%@page import="java.util.ArrayList"%>
<%@page import="java.sql.*" %>
<jsp:include page="header.jsp"></jsp:include>
<jsp:include page="menu.jsp"></jsp:include>

    <%!
        User_Genaral_Service userService = new User_Genaral_Service();
        User_Genaral user;
    %>
    <div id="page-wrapper">
        <div class="row">
            <div class="col-lg-12">
                <h1>Manage Users</h1>
                <%
                    int status=1;
                    int srno=0;

                    if(request.getParameter("status") != null)
                        status = Integer.parseInt (request.getParameter
                        ("status"));

                %>
            </div>
        </div>
        <hr style="width:100%;">
        <div class="row">
            <div class="col-lg-12">
                <a href="viewuser.jsp">
                    <button type="button" class="btn btn-primary btn-lg">
                    View All Users</button>
                </a>
                <a href="viewuser.jsp?status=2" >
                    <button type="button" class="btn btn-primary btn-lg">New
                    User Request</button>
                </a>
            </div>
        </div>
```

```
<br />
<div class="row">
        <div class="col-lg-12">
                <div class="panel panel-default">
 <div class="panel-heading">
        <%
                if(status == 1){
        %>
                        <h4>All Users</h4>
                        <%
                }else{
                        %>
                        <h4>New User Requests</h4>
                        <%
                }
                        %>
 </div>
 <!-- /.panel-heading -->
 <div class="panel-body">
    <div class="dataTable_wrapper">
        <table class="table table-striped table-hover" id="userviewtbl">
                <thead><tr>
                        <th></th>
                        <th style="width:12%;">Full Name</th>
                        <th style="width:12.5%;">User Name</th>
                        <th style="width:20%;">Email</th>
                        <th style="width:8.5%;">Type</th>
                        <th style="width:10%;">Date Of Birth</th>
                        <th style="width:11%;">Contact</th>
                        <th style="width:12%;">Operation</th>
                        <th style="width:9.5%;">Change Status</th>
                </tr></thead>
                <tbody style="text-align:center">
                <%
                        List<kalarav_model.User_Genaral> allusers = new
                        ArrayList<kalarav_model.User_Genaral>();
                        allusers = userService.getAllUsers(status);
                        for(kalarav_model.User_Genaral user: allusers){
                                //for(int i=0;i<20;i++){
                                        srno++;
                %>
                <tr>
                        <td><%=srno%></td>
                        <td><%=user.getFullname()%></td>
                        <td><%=user.getUname()%></td>
                        <td><%=user.getEmail()%></td>
```

```
                                    <td><%=user.getType()%></td>
                                    <td><%=user.getDob()%></td>
                                    <td><%=user.getContact()%></td>
                                    <td>
                                        <button name="detailmodal" id="detailmodal"
                                        data-toggle="moda" data-id="
                                        <%=user.getUser_id()%>"
                                        data-target="#usrdetailmodal" class="btn btn-
                                        info">Details</button>
                                    </td>
                                    <td>
                                        <%
                                            if(user.getUser_status().equals("1")){
                                        %>

    <ahref="../chgUsrStatus?id=<%=user.getUser_id()%>&type=d" >
    <button name="banuser" id="banuser" class="btn btn-danger">Ban User</button></a>
                                                <%
                                                    }
                                                    else{
                                                %>
<a href="../chgUsrStatus?id=<%=user.getUser_id()%>&type=a" >
<button name="approveuser" id="approveuser" class="btn btn-primary">Approve
User</button></a>
                                                <%
                                                    }
                                                %>
                                        </td>
                                    </tr>
                                <%
                                        //}
                                    }
                                %>
                                </tbody>
                                </table>
                                </div>
                                </div>
                                </div>
        </div>
        <!-- /.col-lg-12 -->
            </div>

    <div class="modal fade" id="usrdetailmodal" role="dialog" data-backdrop="static" data-
keyboard="true"
            aria-labelledby="userdetaillable" aria-hidden="true" >
           <div class="modal-dialog">
```

```
                <div class="modal-content">
                  <div class="modal-header">
                    <button type="button" class="close" data-dismiss="modal" aria-
hidden="true">x</button>
                      <h4 class="modal-title" id="usrdetaillable">User Details</h4>
                  </div>
                  <div class="modal-body" id="usrdetaildiv" style="overflow:auto;">

                  </div>
                  <div class="modal-footer">
                    <button class="btn btn-primary" data-dismiss="modal">Close</button>
                  </div>
                </div>
                <!-- /.modal-content -->
              </div>
              <!-- /.modal-dialog -->
            </div>
            <!-- /.modal -->
        </div>
    <jsp:include page="footer.jsp"></jsp:include>

        <script type="text/javascript">
                $("#detailmodal").click(function(){
                        var uid=$(this).data("id");
                        $.ajax({
                                type:'POST',
                                url:'getuserdetail.jsp',
                                data:'id='+uid,
                                success:function(data){
                                        $('#usrdetaildiv').html(data);
                                }
                        });
                });

                $(document).ready(function(){
                        $("#userviewtbl").DataTable({
              responsive: true
                });
                });
        </script>

    <jsp:include page="endingscript.jsp"></jsp:include>
```

**2. Controller for change user status**

```
package kalarav_controller;

import java.io.*;

import javax.servlet.*;
import javax.servlet.http.*;

import kalarav_model.Admin;
import kalarav_service.User_Genaral_Service;

public class ChangeUsrStatus extends HttpServlet{
    /**
     *
     */
    private static final long serialVersionUID = 5602103273707324660L;
    public void doGet(HttpServletRequest request,HttpServletResponse response) throws
ServletException,IOException{
            PrintWriter out = response.getWriter();
     try {
                    User_Genaral_Service userService = new User_Genaral_Service();

                    String id="",type="";

                    if(request.getParameter("id") != null && request.getParameter("type") !=
                    null){

                            id = request.getParameter("id");
                            type = request.getParameter("type");
                            int status = userService.chgUserStatus(Integer.parseInt(id), type);
                            if(status > 0){
                                    response.sendRedirect("admin/viewuser.jsp");
                            }
                            else{
                                    out.println("There are errors");
                            }
                    }
            }
            catch(Exception e){
                    out.println(e);
                    e.printStackTrace(out);
            }
    }
}
```

**3. Service Used**

```
package kalarav_service;

import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.*;

import kalarav_model.Media;
import kalarav_model.State;
import kalarav_model.User_Genaral;
import common.db_connect;

public class User_Genaral_Service {
    db_connect dbc = null;
    ResultSet rsuser = null;
    String query="";
    List<User_Genaral> userList;
    User_Genaral user;
    Media media;
    State state;
    State_Service stateService;
    Media_Service mediaService;

    public User_Genaral_Service(){
        try{
            dbc = new db_connect();
        }
        catch(Exception e){
            System.out.println(e);
        }
    }

    public List<User_Genaral> getAllUsers(int status) throws SQLException{
        userList = new ArrayList<User_Genaral>();
        query = "select * from user_genaral where user_status = "'+status+"'";
        rsuser = dbc.getData(query);
        while(rsuser.next()){
        User_Genaral user = new User_Genaral (rsuser.getInt("user_id"),
        rsuser.getString("user_fname")+" "+rsuser.getString("user_lname"),
        rsuser.getString("user_uname"),rsuser.getString("user_email"),rsuser.getString("u
        ser_dob"),rsuser.getString("user_type"),rsuser.getString("user_contact"),rsuser.ge
        tString("user_status"));

            userList.add(user);
        }
```

```
        return userList;
    }

    public Map<String,String> getUserById(int id) throws SQLException,
    ClassNotFoundException{
        stateService = new State_Service();
        mediaService = new Media_Service();

        query = "select * from user_genaral where user_id = "+id;
        rsuser = dbc.getData(query);
        rsuser.last();
        int total = rsuser.getRow();
        if(total > 0){
            rsuser.beforeFirst();
            Map<String,String> userdetailList = new HashMap<String,String>();
            while(rsuser.next()){

                int media_id = rsuser.getInt("user_media_id");
                //ResultSet rsmedia = mediaService.getMediabyid(1);


                int state_id = rsuser.getInt("user_state_id");
                //ResultSet rsstate = stateService.getStatebyid(4);

                int uid = rsuser.getInt("user_id");
                String fname = rsuser.getString("user_fname");
                String lname = rsuser.getString("user_lname");
                String uname = rsuser.getString("user_uname");
                String email = rsuser.getString("user_email");
                String dob = rsuser.getString("user_dob");
                String type = rsuser.getString("user_type");
                String contact = rsuser.getString("user_contact");
                String addr = rsuser.getString("user_addr");
                String city = rsuser.getString("user_city");
                String status = rsuser.getString("user_status");
//              String state = rsstate.getString("state_name");
//              String profile_pic = rsmedia.getString("media_name");

                userdetailList.put("uid",uid + "");
                userdetailList.put("fname",fname);
                userdetailList.put("lname",lname);
                userdetailList.put("uname",uname);
                userdetailList.put("email",email);
                userdetailList.put("dob",dob);
                userdetailList.put("type",type);
                userdetailList.put("contact",contact);
```

```
                        userdetailList.put("addr",addr);
                        userdetailList.put("city",city);
                        userdetailList.put("state",state_id+"");
                        userdetailList.put("media",media_id+"");
                        userdetailList.put("status",status);
                }
                return userdetailList;
        }
        else{
                return null;
        }
    }

    public int chgUserStatus(int id,String type) throws SQLException{
        if(type.equals("d")){
                query = "update user_genaral set user_status = '2' where user_id =" + id;
                int af_row = dbc.setData(query);
                return af_row;
        }
        else{
                query = "update user_genaral set user_status = '1' where user_id =" + id;
                int af_row = dbc.setData(query);
                return af_row;
        }
    }

    public int getRowCount() throws SQLException{
        query = "select count(*) from user_genaral";
        rsuser = dbc.getData(query);
        if(rsuser.next())
                return rsuser.getInt(1);
        else
                return 0;
    }
}
```

## 3.2 SCREEN SHOTS FOR APPLICATION

- **User Interface**

**Figure 3.1 Home Page**

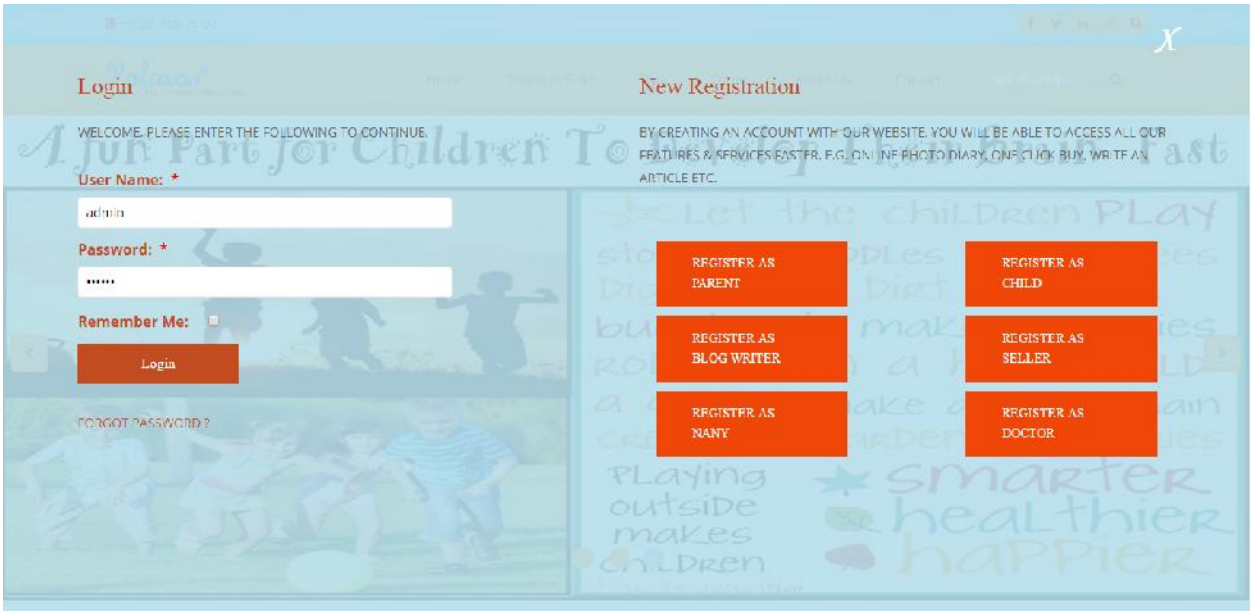



**Figure 3.2 Login & Registration**

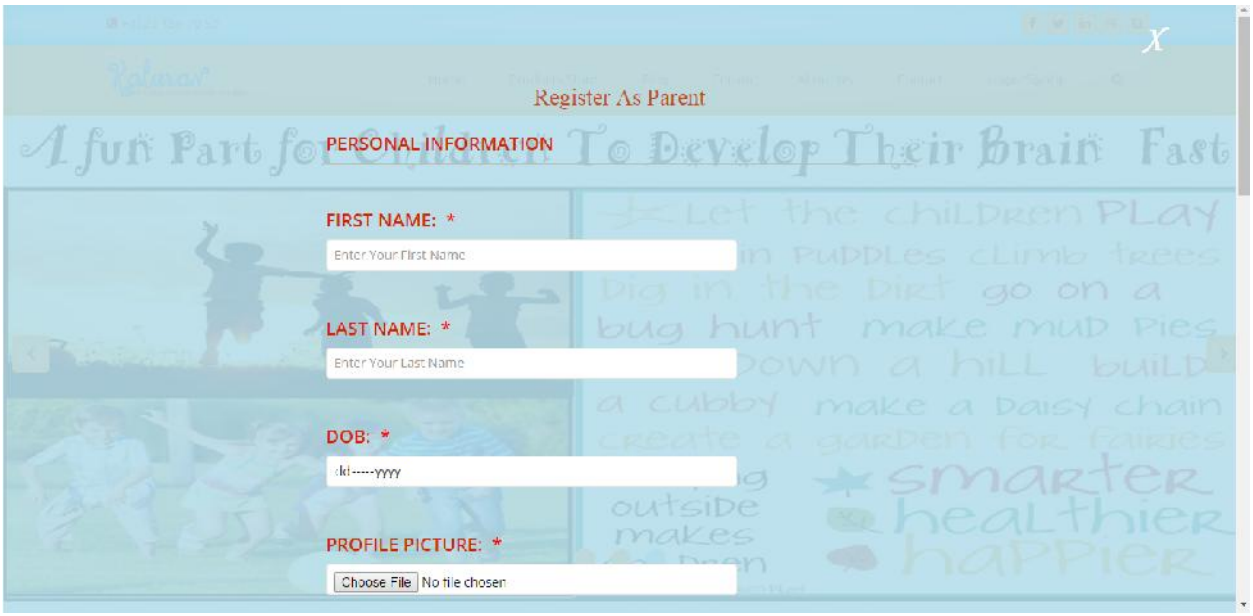



**Figure 3.3 Detailed Registration**

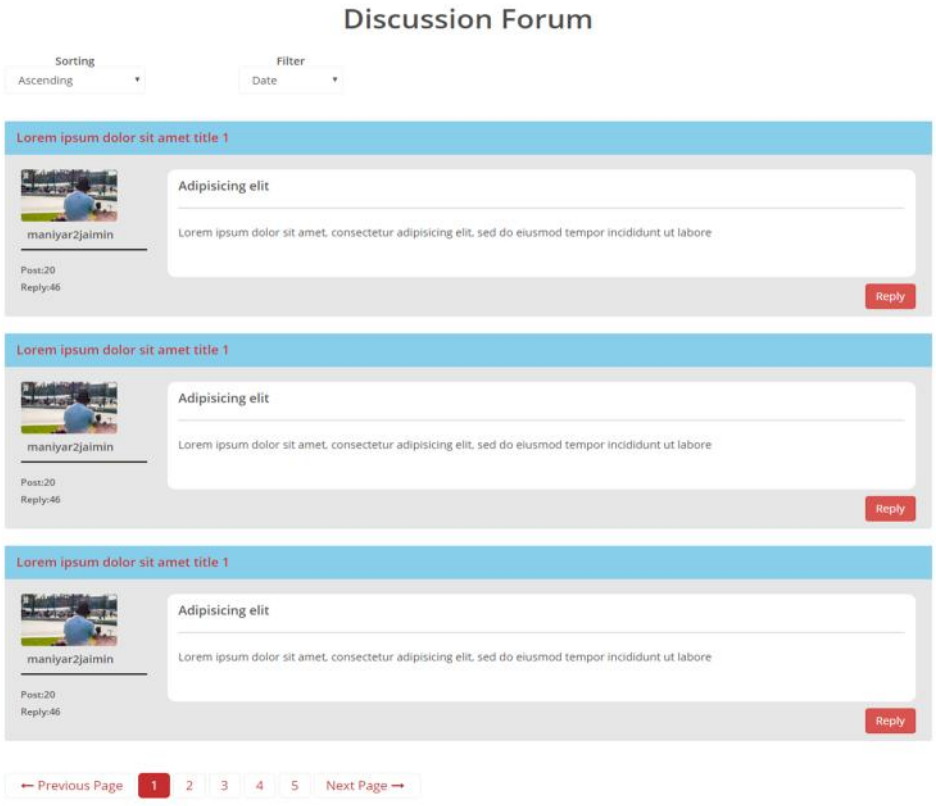



**Figure 3.4 Discussion Forum**

**Figure 3.5 Blog**

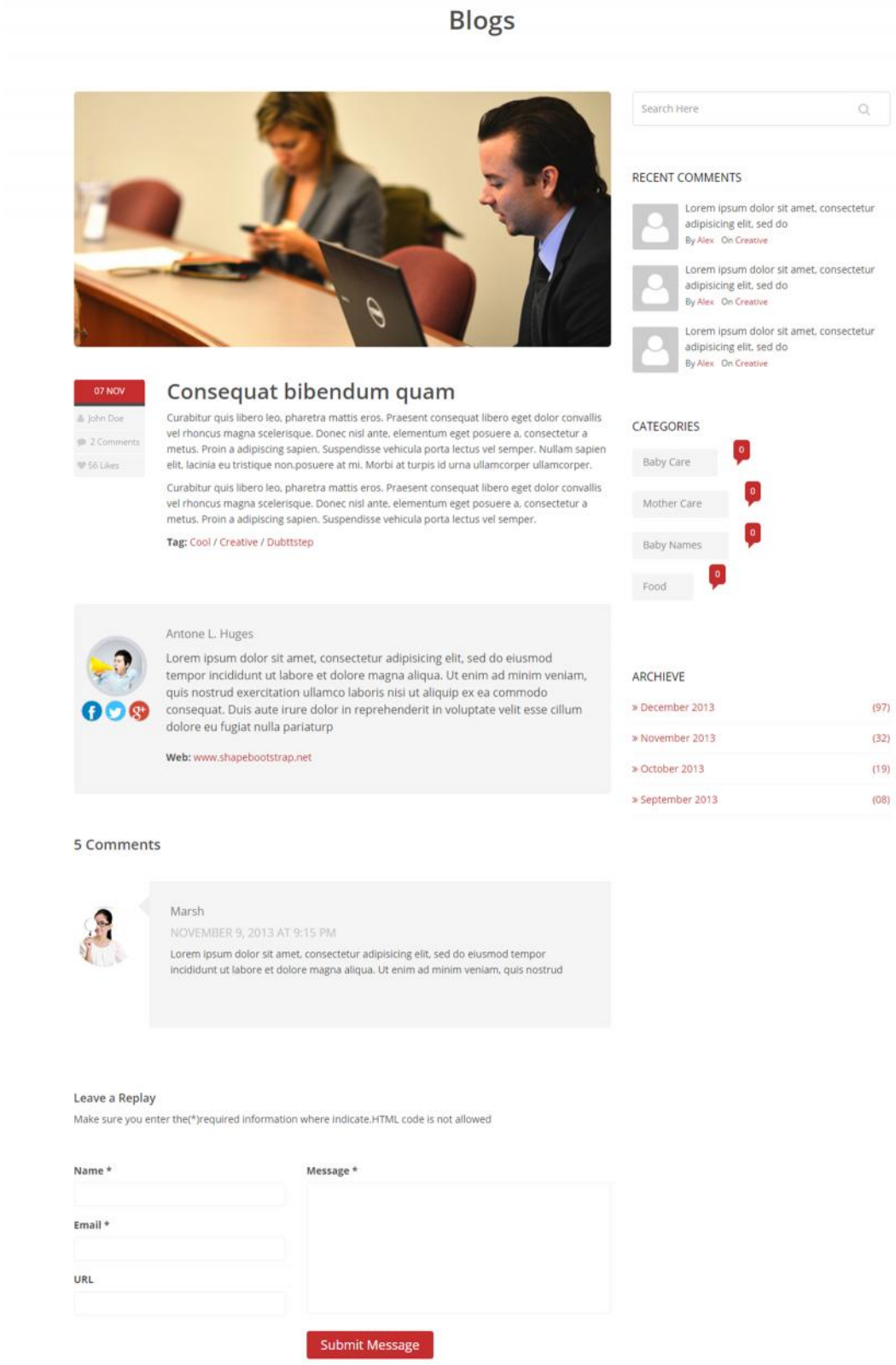



**Figure 3.6 Full Article of Blog**

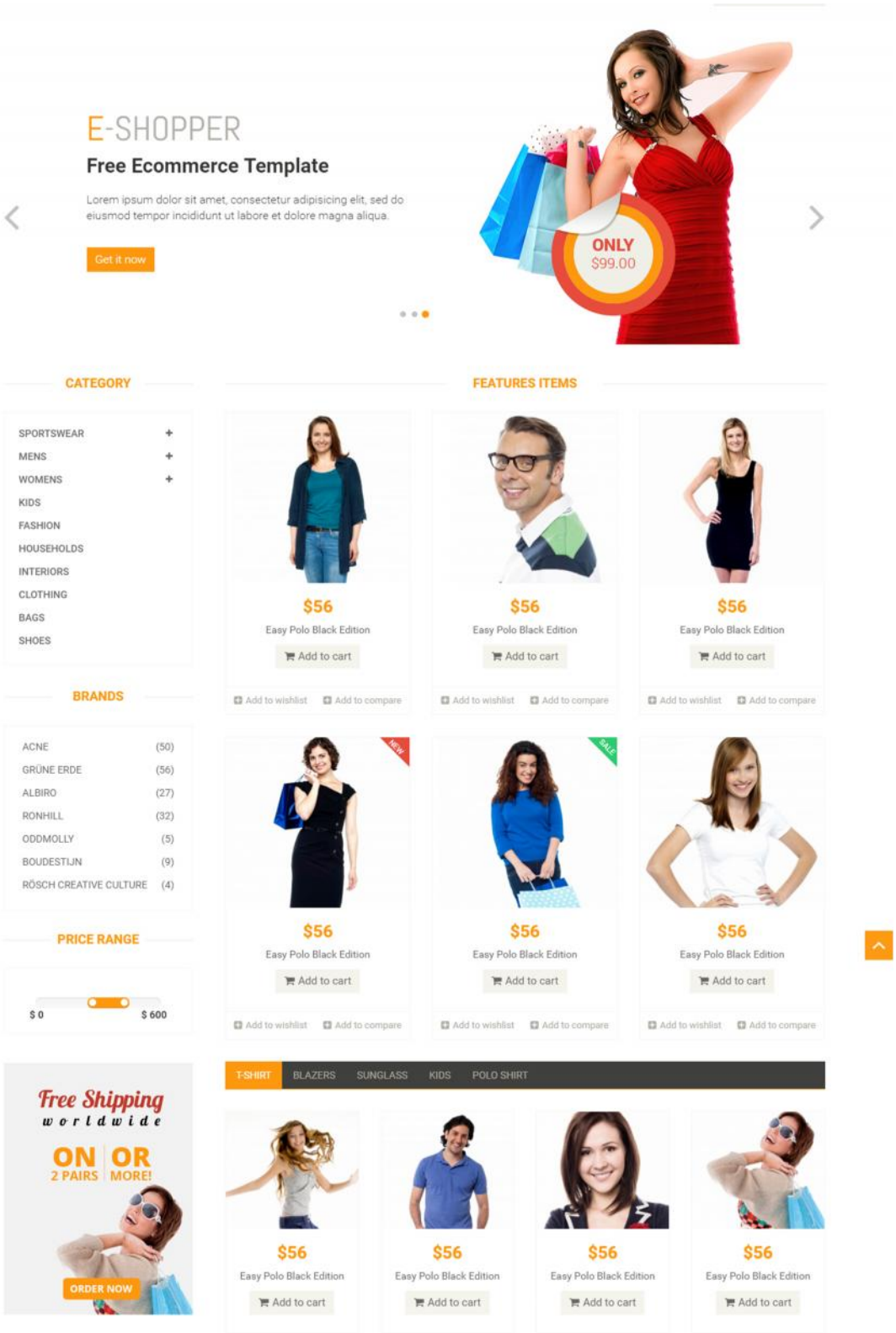



**Figure 3.7 Product Store Home**

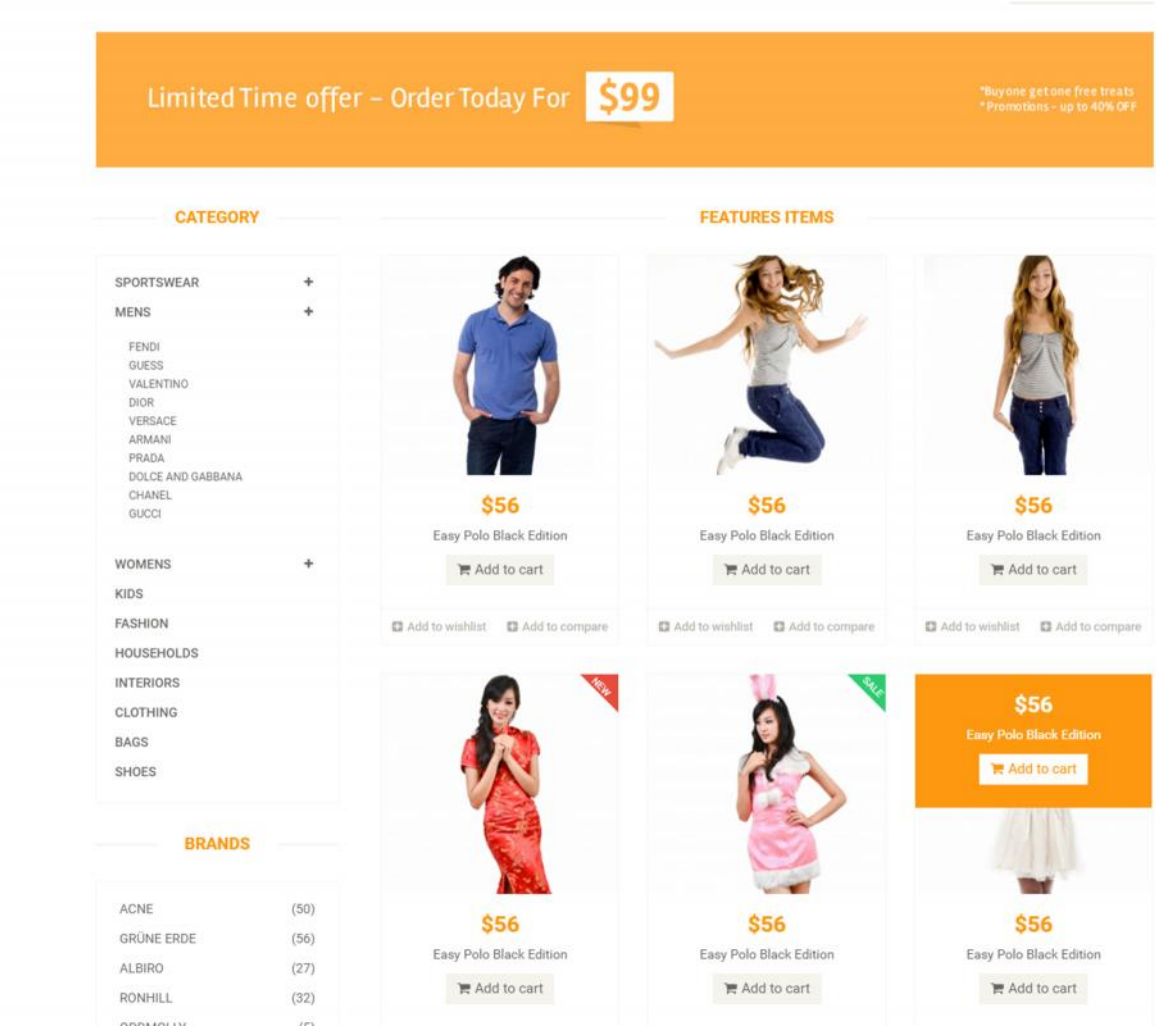



**Figure 3.8 Product Category Page**

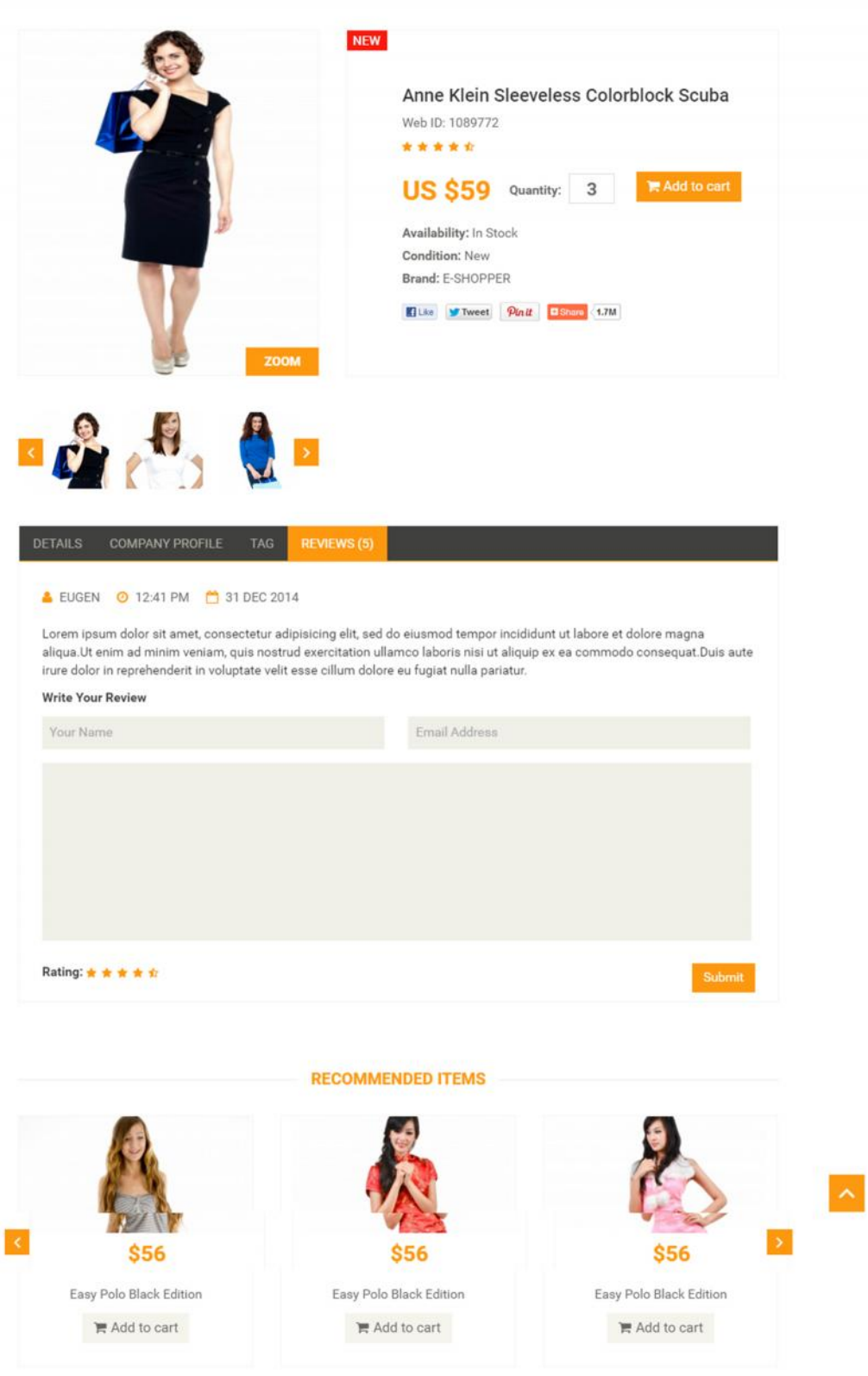



**Figure 3.9 Product Detail Page**

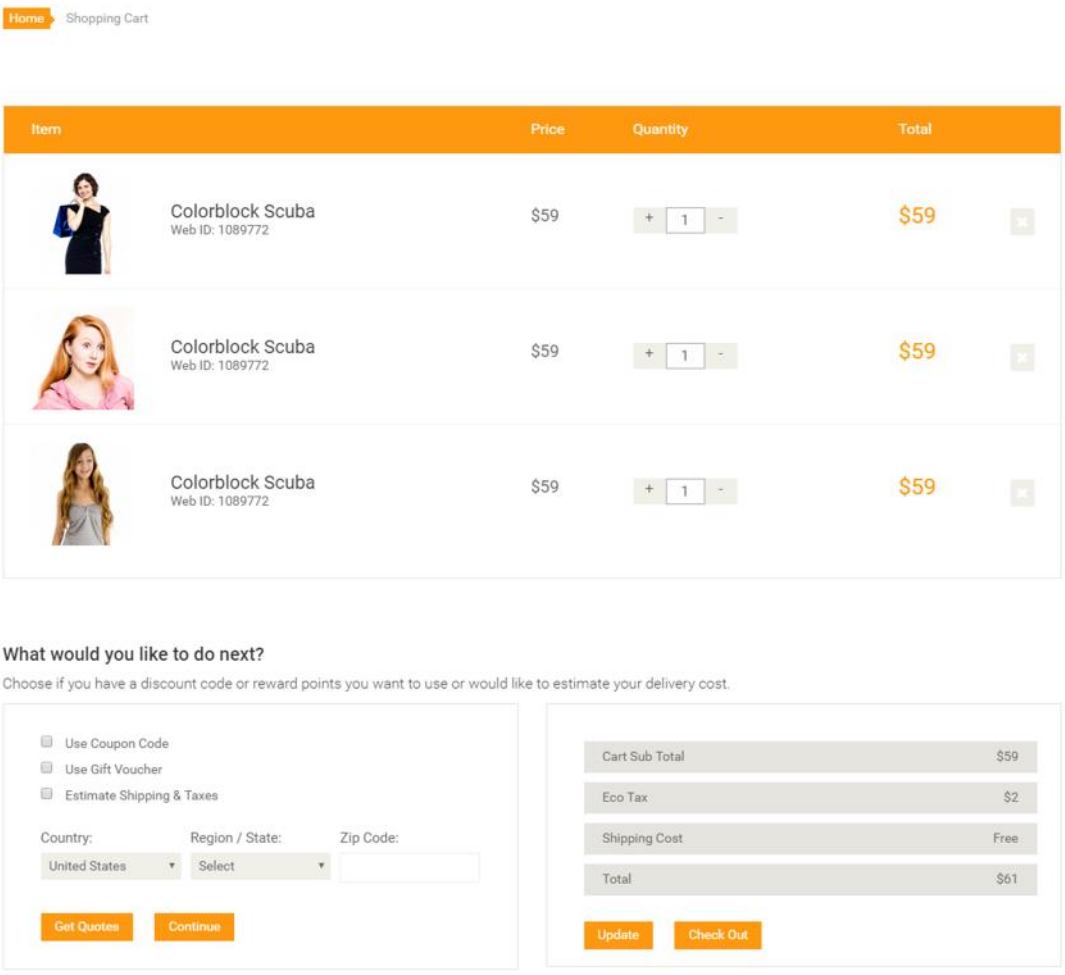



**Figure 3.10 Product Cart**

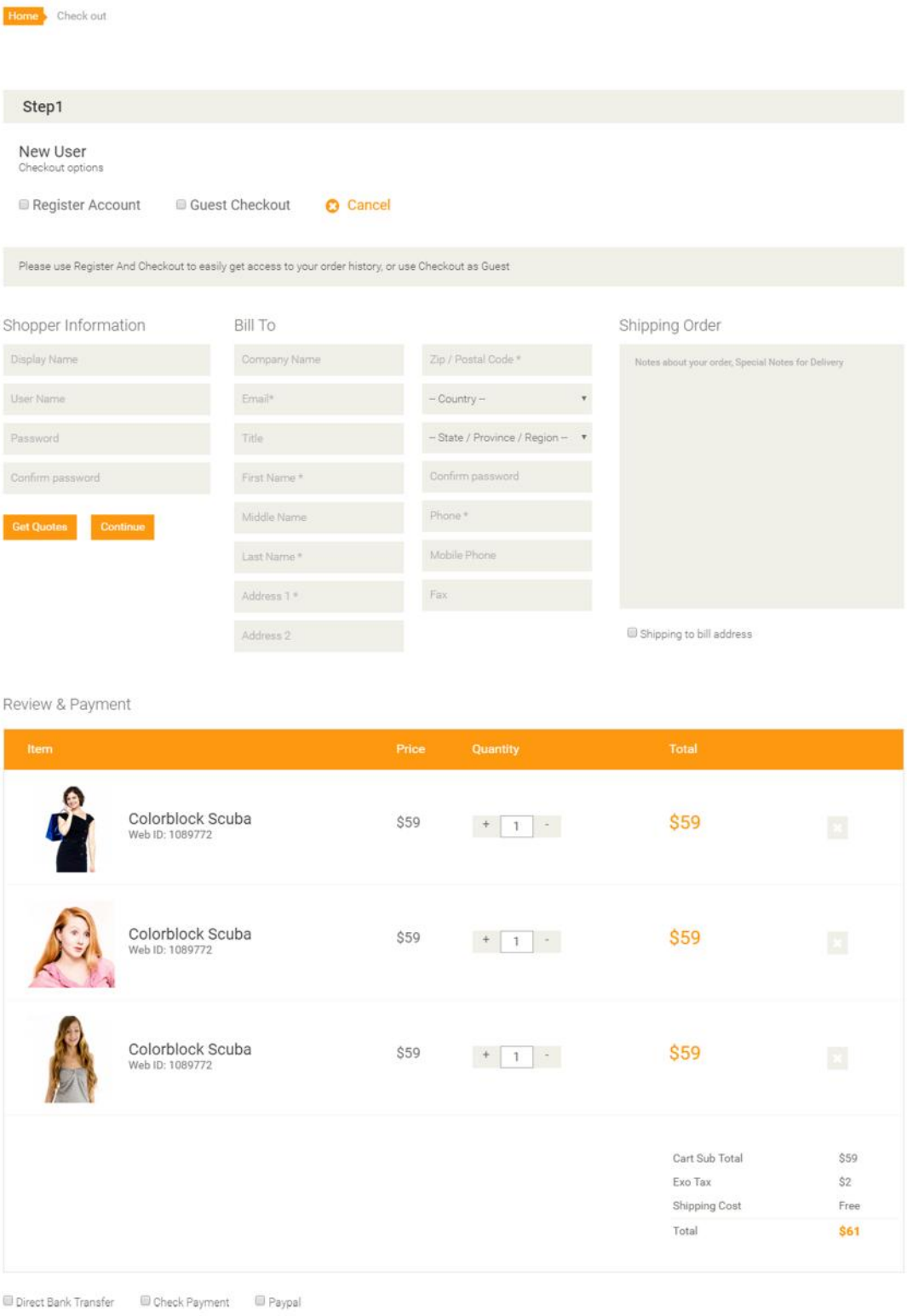



**Figure 3.11 Store Check Out**

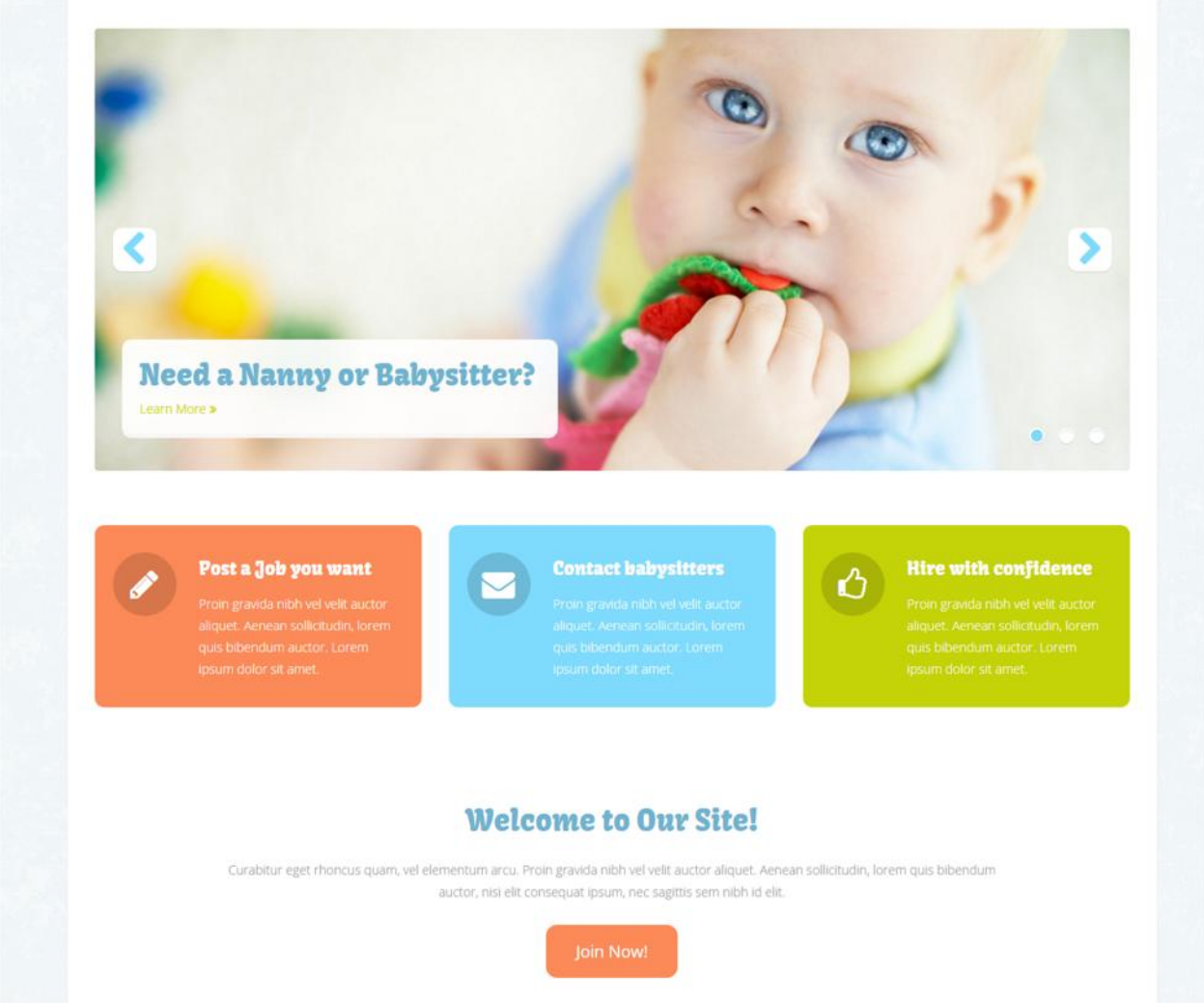



**Figure 3.12 BabySitter Hire Home**

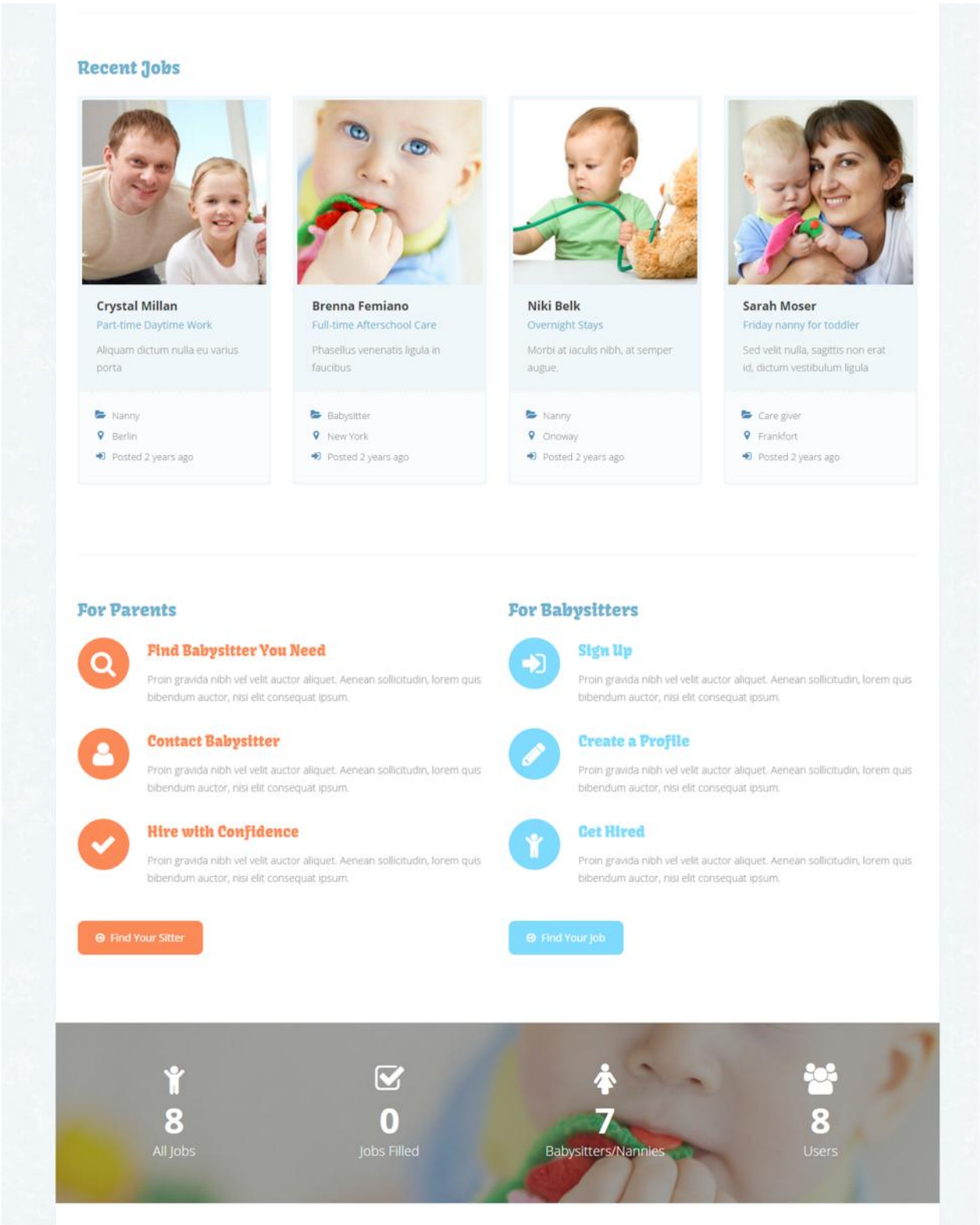



**Figure 3.13 BabySitter Service Home**

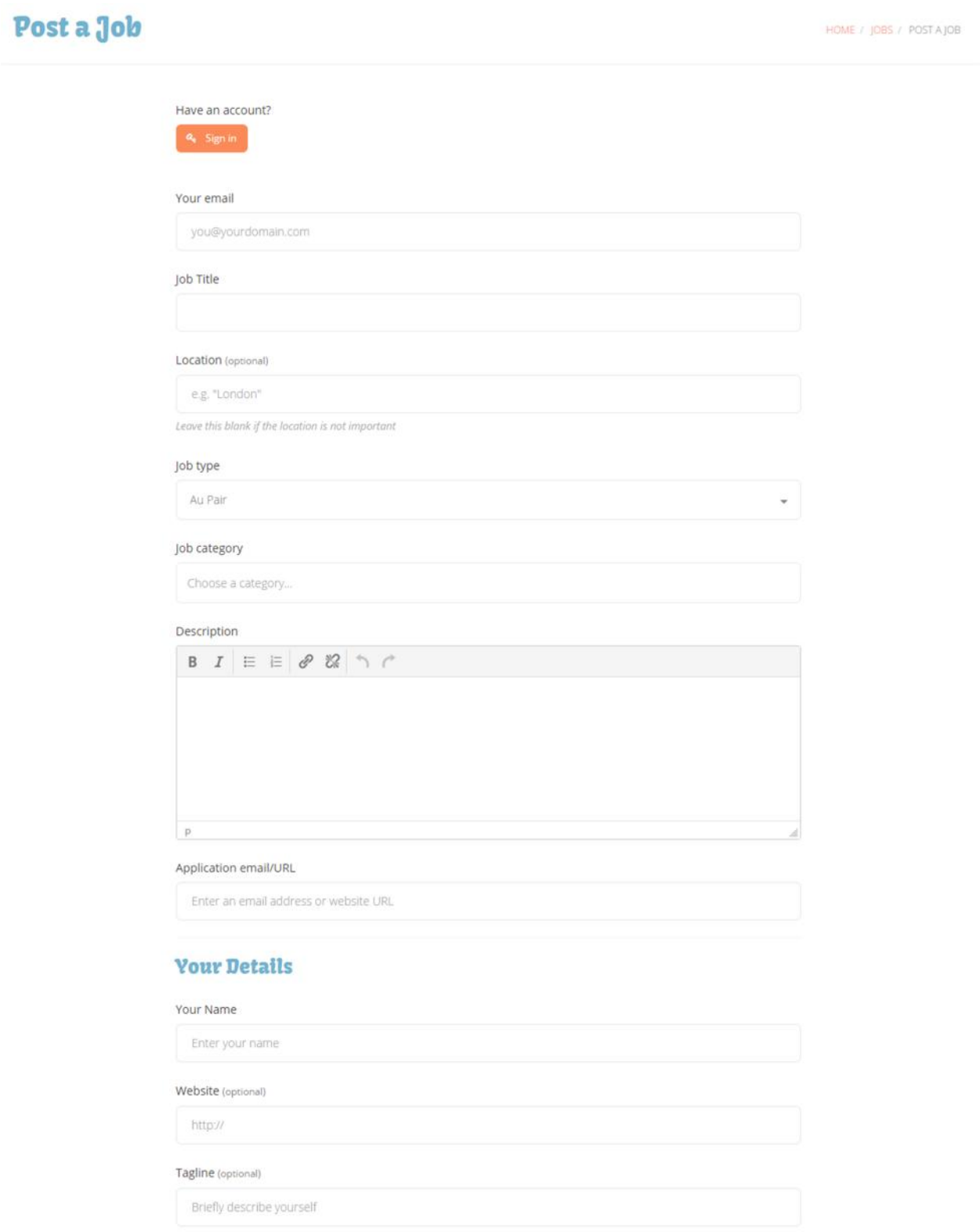



**Figure 3.14 Post a Job**

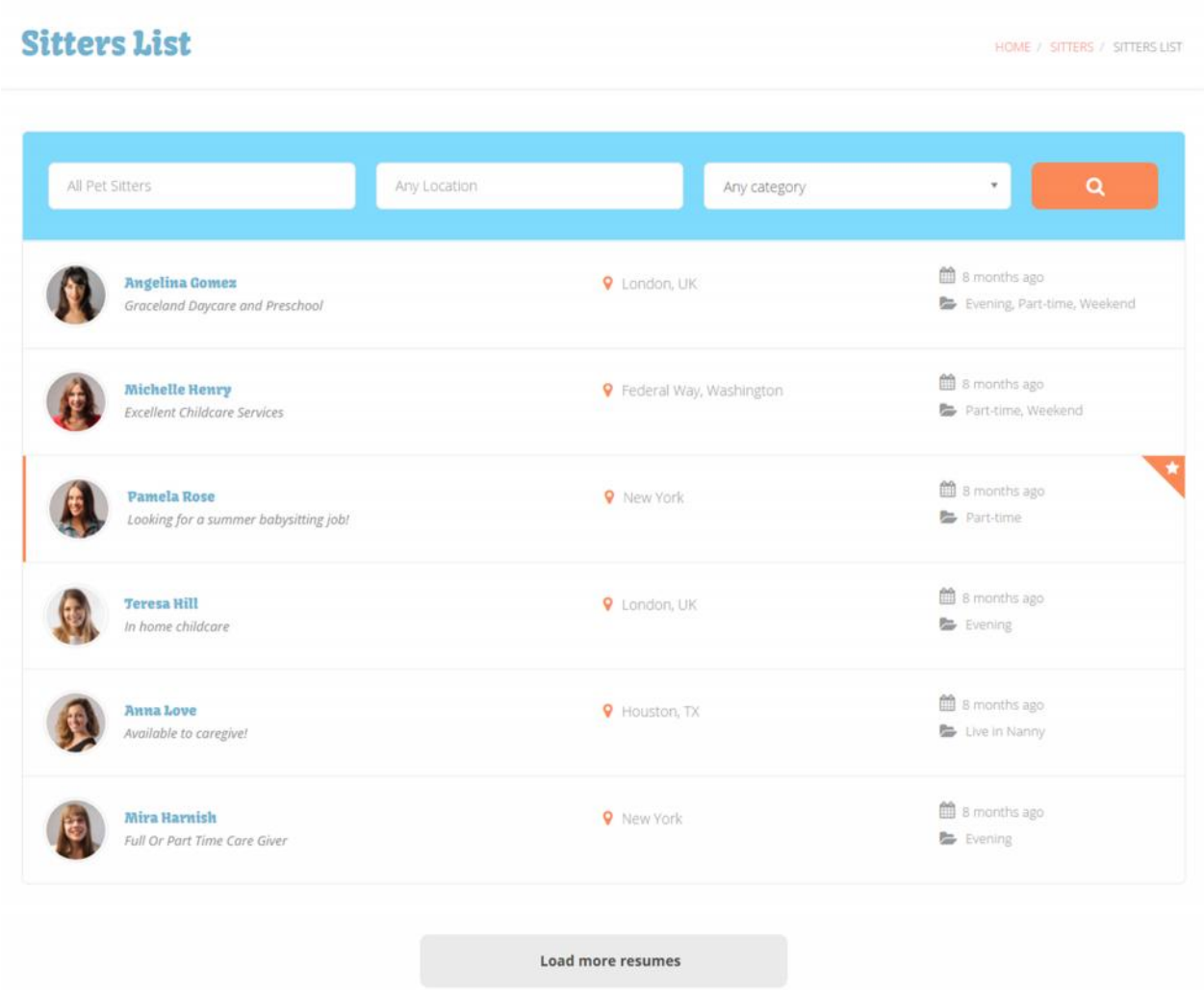



**Figure 3.15 Sitters List**

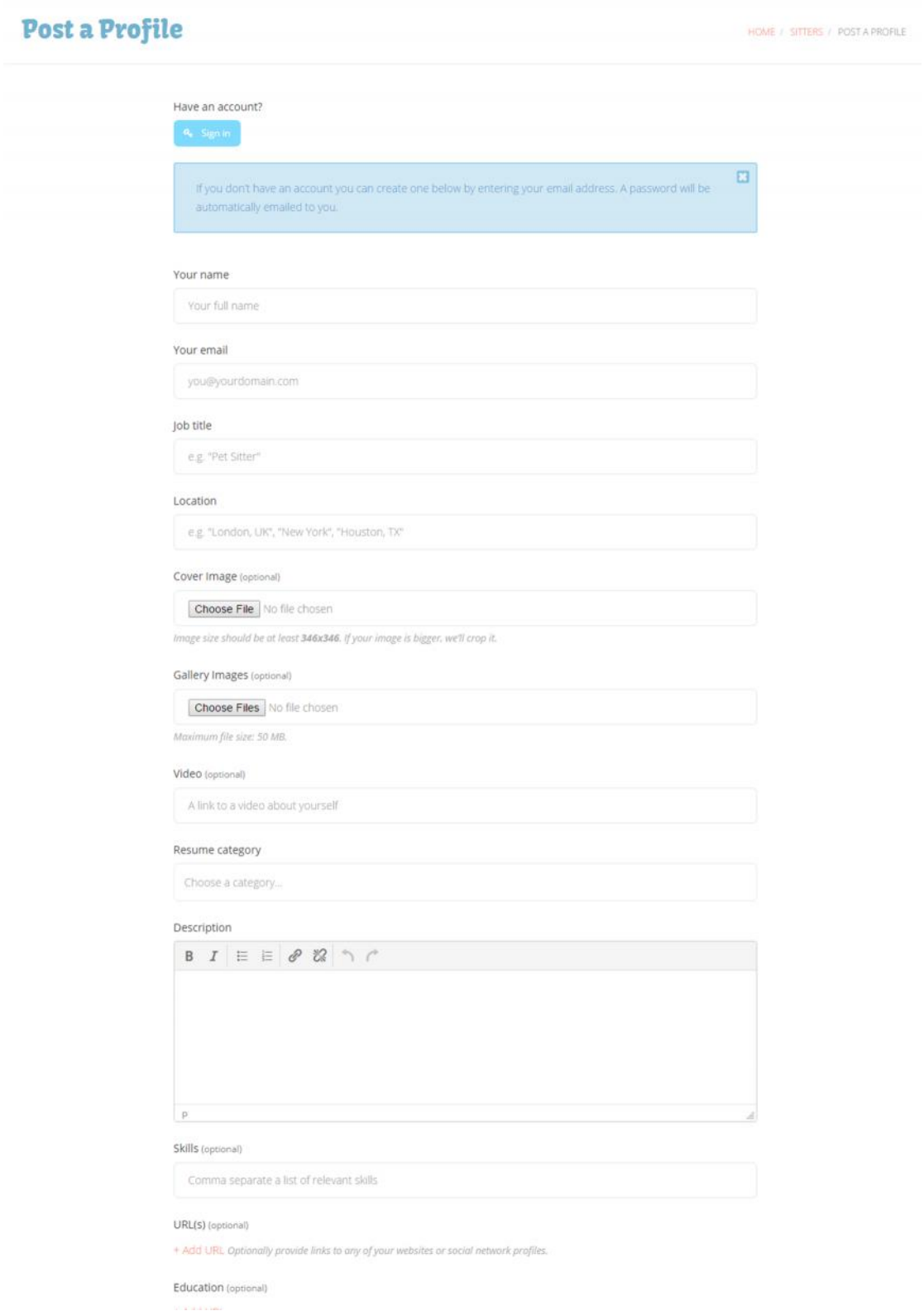



**Figure 3.16 Post a Profile**

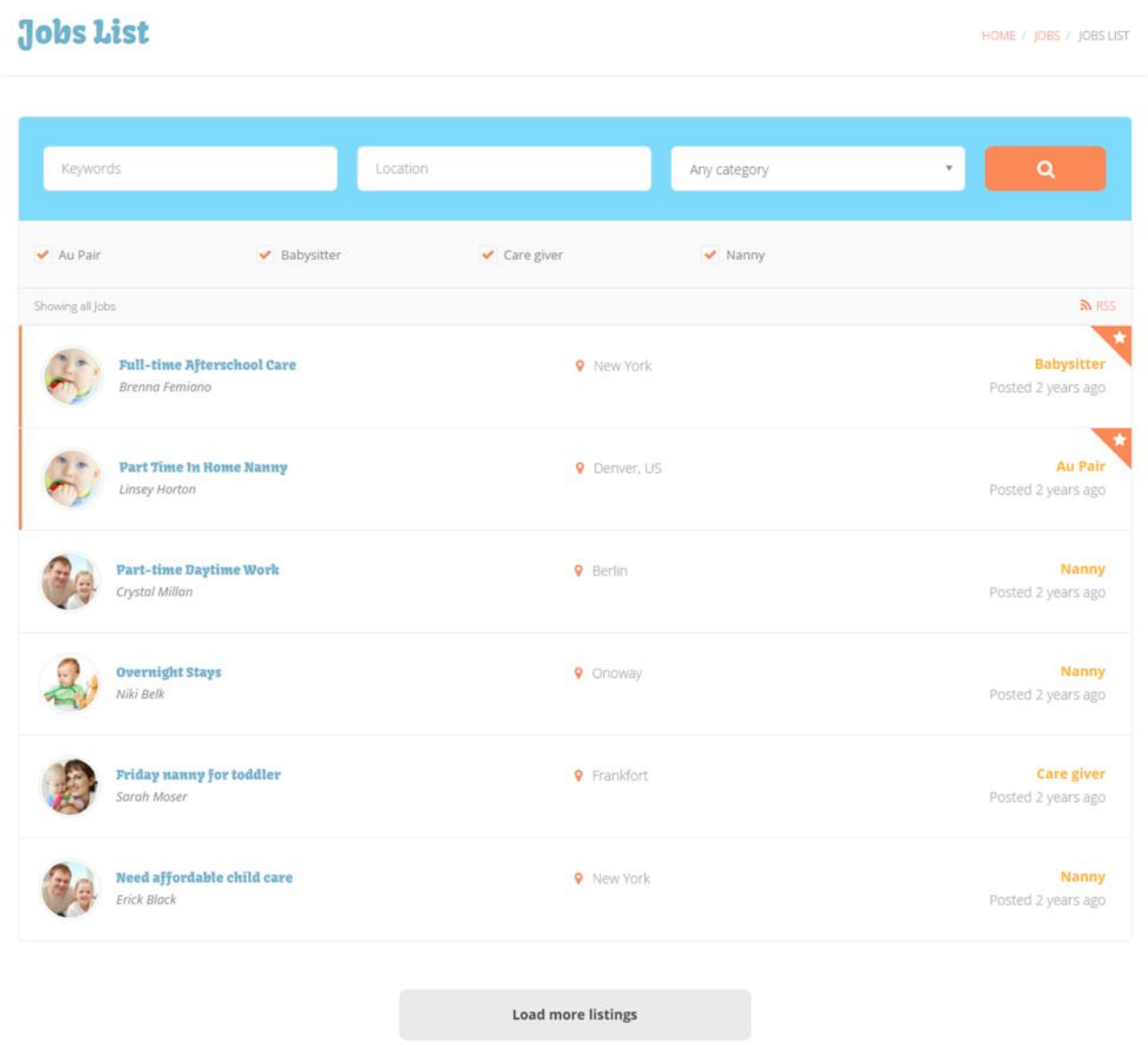



**Figure 3.17 Job List**

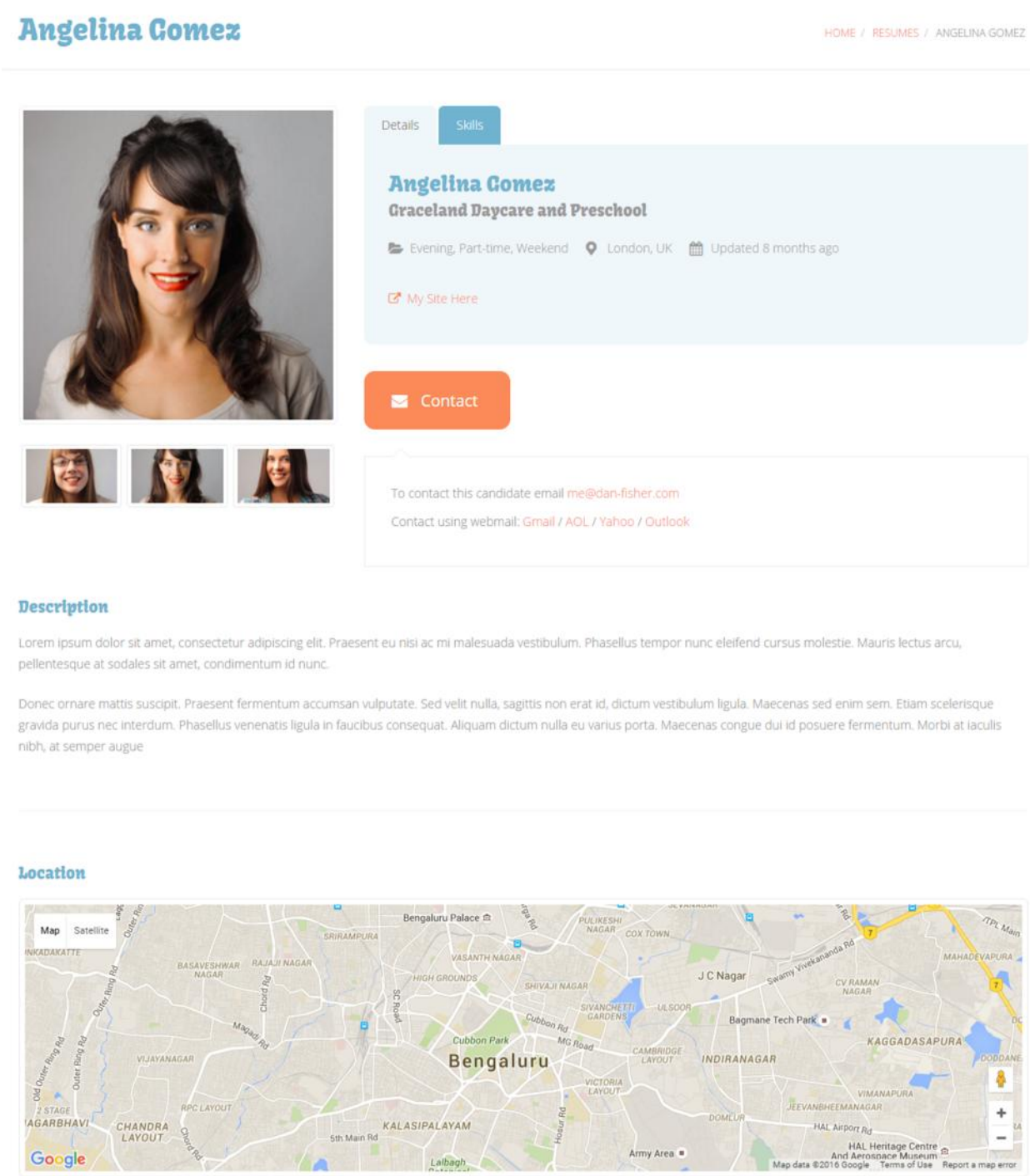



**Figure 3.18 Babysitter Detail Page**

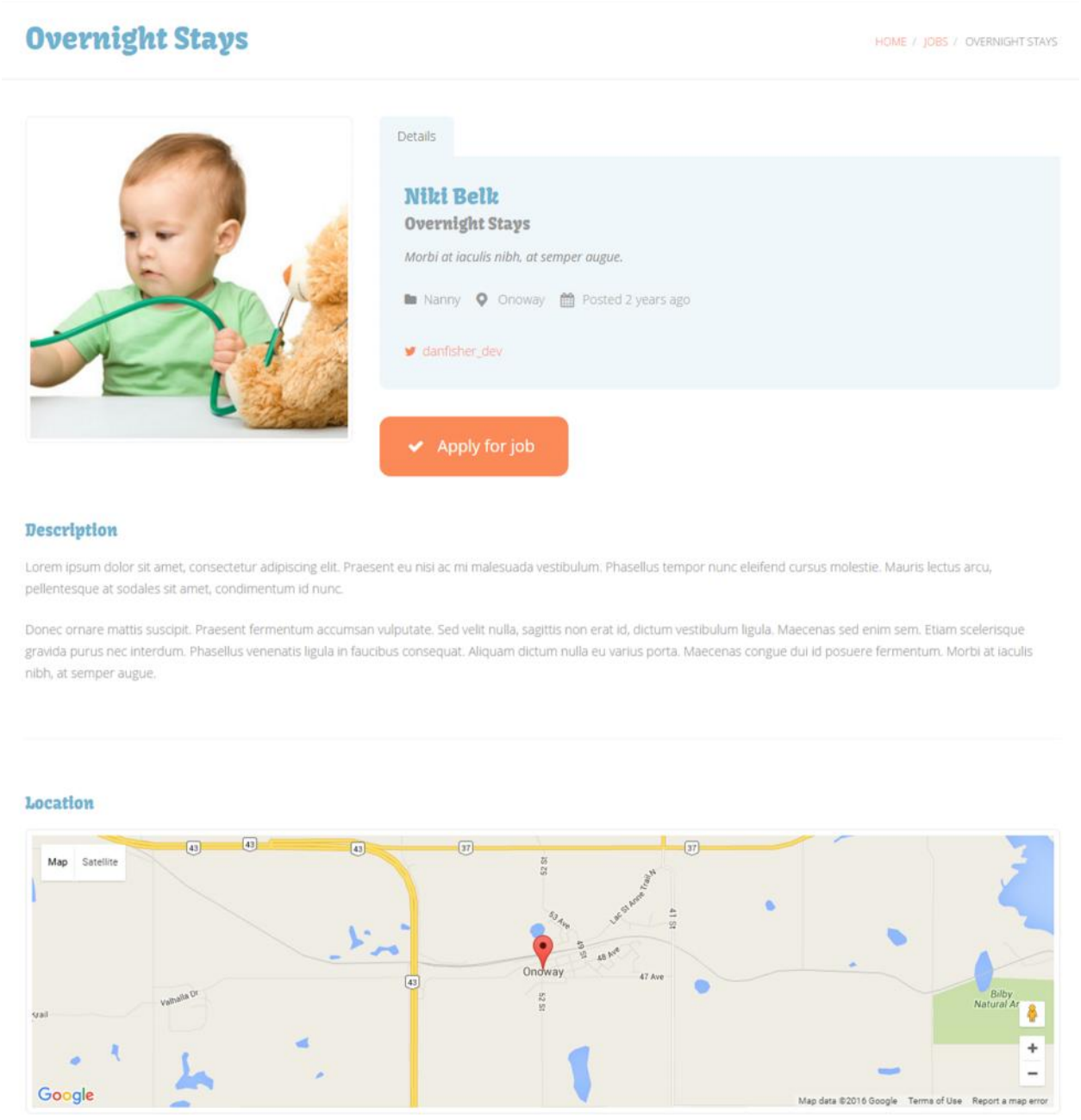



**Figure 3.19 Job Detail Page**

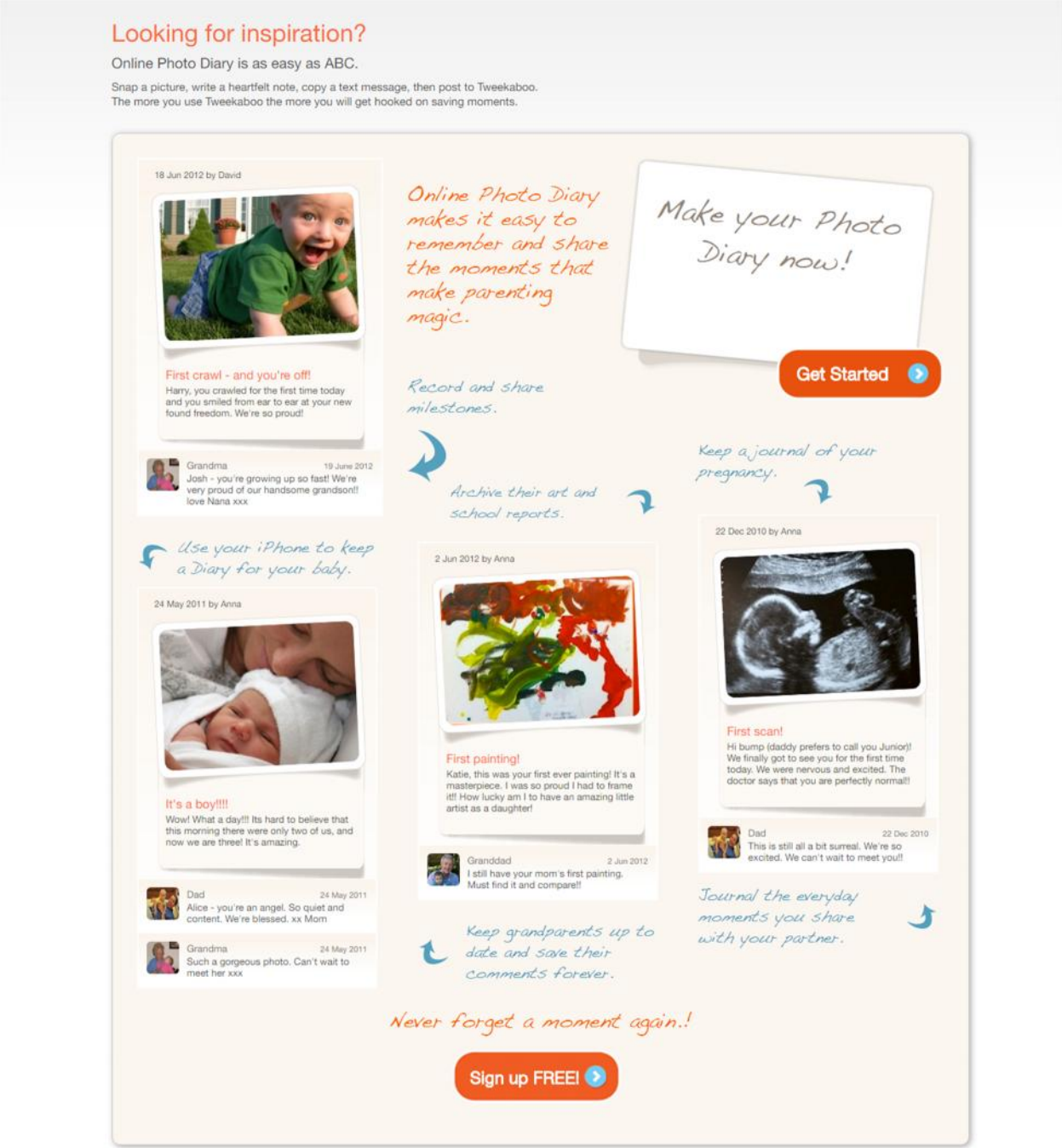



**Figure 3.20 Online Photo Diary Demo**

- **Admin Interface**

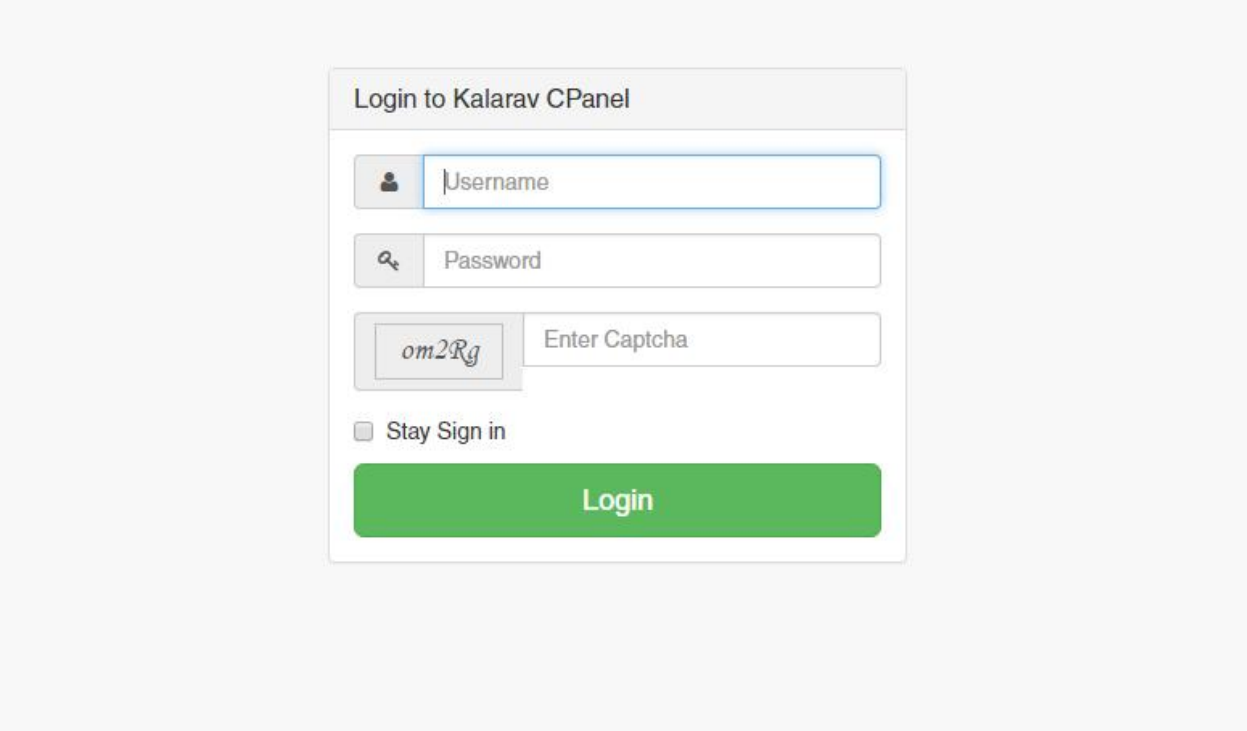



**Figure 3.21 Admin Login Screen**

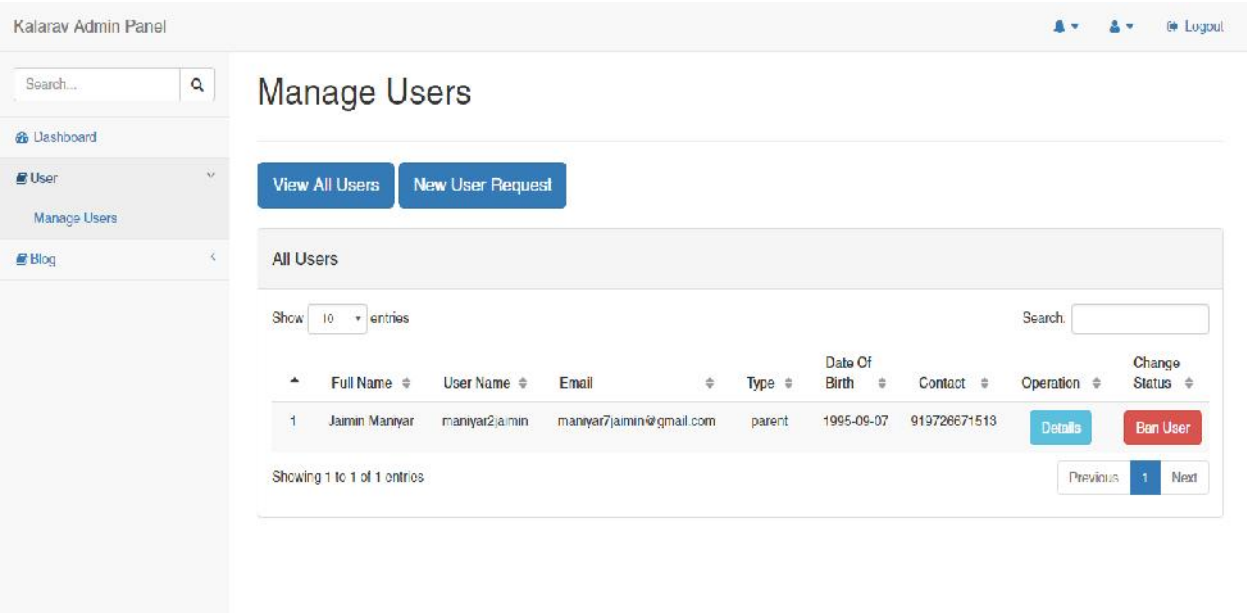



**Figure 3.22 User View Screen**

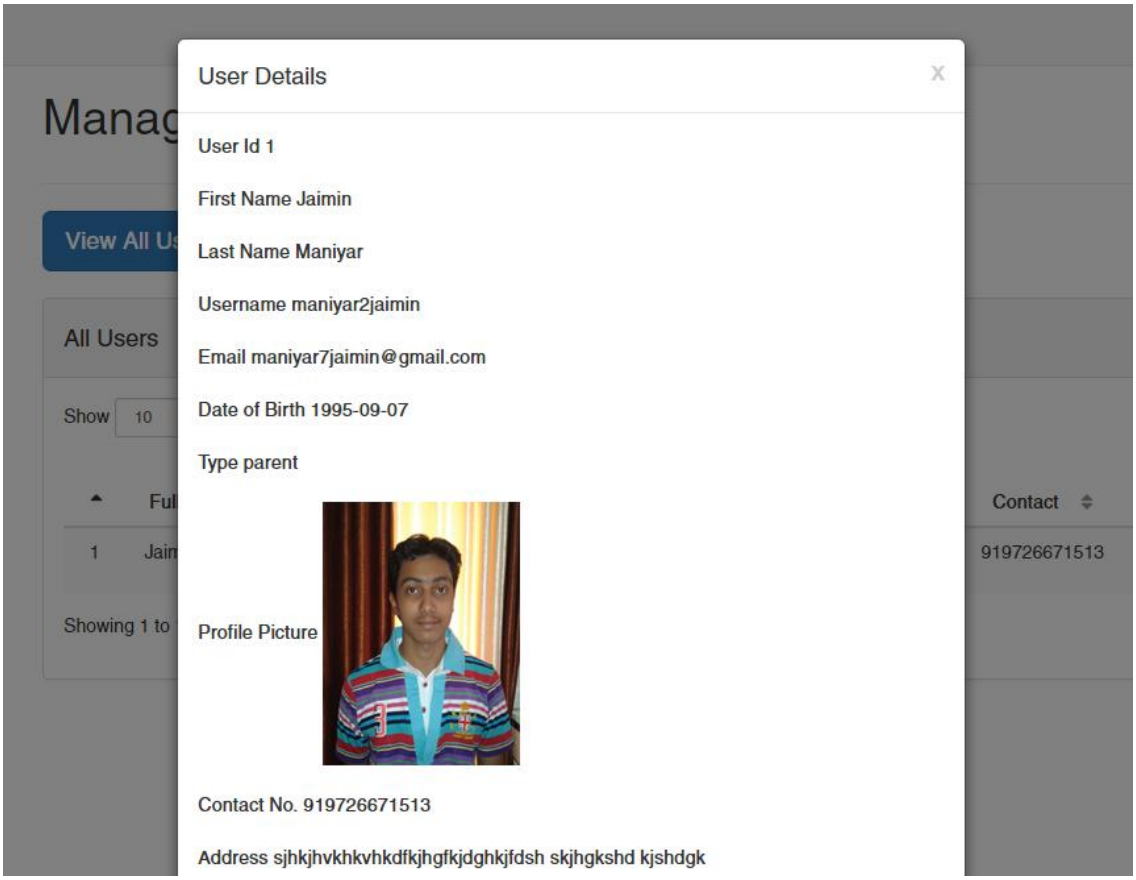



**Figure 3.23 User Detail Overlay**

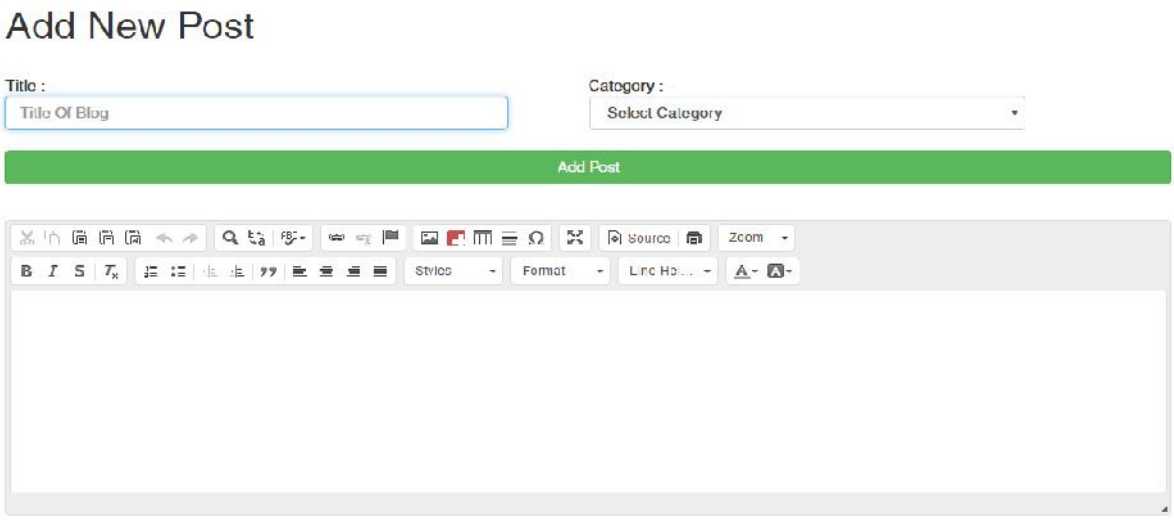



**Figure 3.24 Add Blog Post**

## 3.3 TESTING AND VERIFICATION

- **TEST CASES**

The purpose of the test cases is to test the various input and see the output produce any error or not. There are different test cases according to the system .It is tested with different types of values like single value multiple value and se it can generate expected output.

| Test Case | Expected Output | Actual Output | Result |
|---|---|---|---|
| **1. Navigation to Home Page.** | Is Home Page Open Correctly? | Home Page Opened properly | PASS |
| **2. Login in the system** | Is Login functionality work correctly? | Login Successful and All features are working which is displayed to logged in user | PASS |
| **3. Sign Up in System** | Different Sign in for different users roles | Work Correctly but there is no validation | NO |
| **4. View Blog** | Blog Page | All features of blog work correctly | PASS |
| **5. Blog After Login** | Can user add an article? | Article adding functionality working properly | PASS |
| **6. Product Store** | Can guest view all products? | Yes | PASS |
| **7. Product Store after login** | Can user buy a product from store? | Yes | PASS |
| **8. Nanny hire service** | Is it working correctly? | Yes all features works well | PASS |
| **9. Checkout using PayPal** | Payment Successful | Payment Successful | PASS |
| **10. Update Profile** | Profile must be updated. | Profile updated. | PASS |

| | | | |
|---|---|---|---|
| **11. Seller's DashBoard** | Is it have all necessary features as per guidelines | Yes | PASS |
| **12. Online Photo Diary** | Is it have all necessary functionality as per guidelines | Yes | PASS |
| **13. Vaccination Alert** | Is it generated for registered & subscribed users? | Yes | PASS |

**Table 3.1 Test Cases and Result**

# 4. CONCLUSION AND DISCUSSION

Internet users are growing in the world. In 2005-2010 there were fewer who use internet in the India, but now a day there were over billions of users in the India alone. The growth of this industry is being pushed by large businesses wishing to sell products and services to their customers and to automate business workflow.

The new parents has to deal with the local doctors for their queries only and so parents are not able to get the more specific solution for the problem.

Also the website related to this does not have any of the information at one place. Parents have to use internet which is sometimes a tedious task so to make their effort less I am developing this application. Also people can easily take counselling at any time from online counselor without visit the doctor place.

My project is made for parents & pregnant ladies. It have such modules for helping parents in terms of any task related to perinatal care. Application have an online photo diary by which parents can store good memories of child for future purpose. Internet is every ware so any one can use this application with help of internet.

My project includes various modules like login or registers through user_id & password, maintain his profile, read & write blog, discuss on forum for any queries etc.

PRINT BACK

**Enrollment No :** 120470107032

**College :** Vyavasayi Vidya Pratishthan's Sanch. College Of Engineering, Rajkot

**Student Name :** Maniyar Jaimin Rajenbhai

**Department :** Computer Engineering

**Mobile No :**

**Discipline :** BE

**Email :**

**Semester :** Semester 8

## PPR Details

**Time Interval :** -

**Periodic Progess Report : First PPR**

**Project :** Kalarav - The Step Towards Baby Care

**Status :** Reviewed (Freeze)

**1. What Progress you have made in the Project ?**

In this 14 days span I fill my team approval request on GTU PMMS Portal. With this I also staring the designing of my project at user side. In that I made a design of home page, Blog & Discussion Forum. Now I start the data collection for my project.

**2. What challenge you have faced ?**

During design of my project I face some problem in designing of home page. As I am developing my design in bootstrap I found some isuue in making responsive screen. But now it is solved.

**3. What support you need ?**

Currently I did not need any support.

**4. Which literature you have referred ?**

I refer various themes of bootstrap to generate my project theme. For data collection I refer sites like parenting.com, kindercare.com, etc.

## Comments

**Comment by Internal Guide :**

good going....

PRINT BACK

**Enrollment No :** 120470107032

**College :** Vyavasayi Vidya Pratishthan's Sanch. College Of Engineering, Rajkot

**Student Name :** Maniyar Jaimin Rajenbhai

**Department :** Computer Engineering

**Mobile No :**

**Discipline :** BE

**Email :**

**Semester :** Semester 8

## PPR Details

**Time Interval :** 7 days, 23 hours, 51 minutes, 26 seconds

**Periodic Progess Report : Second PPR**

**Project :** Kalarav - The Step Towards Baby Care

**Status :** Reviewed（Freeze）

**1. What Progress you have made in the Project ?**

As in last week I collect the data for my project so in this week that task is completed & I made a rich database from it. Based on this data I made a admin panel for management of that data. In admin panel currently I complete design and some modules for management of website like user handling, blog writing, etc.

**2. What challenge you have faced ?**

In this week I don't face any challenge. But I learn how MVC framework work and apply it in my code.

**3. What support you need ?**

Currently I did not need any support.

**4. Which literature you have referred ?**

I referred some website for understanding how MVC framework work. After that I refer how to apply it in coding structure and what is the best practice for for writing code in well structured manner.

## Comments

PRINT BACK

**Enrollment No :** 120470107032

**College :** Vyavasayi Vidya Pratishthan's Sanch. College Of Engineering, Rajkot

**Student Name :** Maniyar Jaimin Rajenbhai

**Department :** Computer Engineering

**Mobile No :**

**Discipline :** BE

**Email :**

**Semester :** Semester 8

## PPR Details

**Time Interval :** 2 days, 7 hours, 18 minutes, 44 seconds

**Periodic Progess Report : Third PPR**

**Project :** Kalarav - The Step Towards Baby Care

**Status :** Reviewed (Freeze)

**1. What Progress you have made in the Project ?**

In this time span I made much progress in project. I complete the admin panel of website. I made modals & services for all database table. I started the development of User Side. In that I complete the design as well as I made two module blog & discussion forum. Now I started the development of website specific features like vaccination alert generation, online photo diary etc.

**2. What challenge you have faced ?**

As I am implementing MVC frame work I face challenge in maintain it. I got the solutions from google about it.

**3. What support you need ?**

Currently I don't need any support.

**4. Which literature you have referred ?**

I refer the website like kindercare.com how it works and how they manage their article of blogs, then I refer some discussion forum for add features to my forum and I make a specific design according to my theme child care.

## Comments

PRINT BACK

**Enrollment No :** 120470107032

**College :** Vyavasayi Vidya Pratishthan's Sanch. College Of Engineering, Rajkot

**Student Name :** Maniyar Jaimin Rajenbhai

**Department :** Computer Engineering

**Mobile No :**

**Discipline :** BE

**Email :**

**Semester :** Semester 8

## PPR Details

**Time Interval :** 16 days, 20 hours, 19 minutes, 33 seconds

**Periodic Progess Report : Forth PPR**

**Project :** Kalarav - The Step Towards Baby Care

**Status :** Reviewed（Freeze）

**1. What Progress you have made in the Project ?**

In this time span I do some PMMS activities like Business Modal Canvas & PDE Form 1 with this I also do the projects activities like I complete the coding of Online Product Store Module, Vaccination alert, Online Photo Diary & Seller Dash Board.

**2. What challenge you have faced ?**

I face some challenge when I implement the payment system in Product Store it is solved by My external Guide I also find some solution using google.

**3. What support you need ?**

Currently I don't need any support

**4. Which literature you have referred ?**

I refer the websites firstcry.com for making my Online Product Store functionality. I use the ready-made api for online payment syatem.

## Comments

# GTU Innovation Council

## Patent Drafting Exercise (PDE)

| | |
|---|---|
| **FORM 1**<br>**THE PATENTS ACT 1970**<br>**(39 OF 1970)**<br>**&**<br>**THE PATENTS RULES, 2003**<br>**APPLICATION FOR GRANT OF PATENT** | **(FOR OFFICE USE ONLY)**<br>**Application No:**<br>**Filing Date:**<br>**Amount of Fee paid:**<br>**CBR No:**_____ |

**1. Applicant(s) :**

| ID | Name | Nationality | Address | Mobile No. | Email |
|---|---|---|---|---|---|
| 1 | Maniyar Jaimin Rajenbhai | Indian | Computer Engineering , Vyavasayi Vidya Pratishthan's Sanch. College Of Engineering, Rajkot , Gujarat Technologycal University. | 9726671513 | maniyar7jaimin@gmail.com |

**2. Inventor(s):**

| ID | Name | Nationality | Address | Mobile No. | Email |
|---|---|---|---|---|---|
| 1 | Maniyar Jaimin Rajenbhai | Indian | Computer Engineering , Vyavasayi Vidya Pratishthan's Sanch. College Of Engineering, Rajkot , Gujarat Technologycal University. | 9726671513 | maniyar7jaimin@gmail.com |

**3. Title of Invention/Project:**

Kalarav - The Step Towards Baby Care

**4. Address for correspondence of applicant/authorized patent agent in india**

**Name:** Maniyar Jaimin Rajenbhai
**Address:** Computer Engineering , Vyavasayi Vidya Pratishthan's Sanch. College Of Engineering, Rajkot , Gujarat Technological University.
**Mobile:** 9726671513
**Email ID:** maniyar7jaimin@gmail.com

**5. Priority particulars of the application(S) field in convention country**

| Country | Application No. | Filing Date | Name of the Applicant | Title of the Invention |
|---|---|---|---|---|
| *N/A* | *N/A* | *N/A* | *N/A* | *N/A* |

**6. Particulars for filing patent co-operation treaty (pct) national phase Application**

| International application number | International filing date as alloted by the receiving office |
|---|---|
| N/A | N/A |

**7. Particulars for filing divisional application**

| Original(First) Application Number | Date of filing of Original (first) application |
|---|---|
| N/A | N/A |

**8. Particulars for filing patent of addition**

| Original(First) Application Number | Date of filing of Original (first) application |
|---|---|
| N/A | N/A |

**9. DECLARATIONS:**

**(i) Declaration by the inventor(s)**

I/We, the above named inventor(s) is/are true & first inventor(s) for this invention and declare that the applicant(s). herein is/are my/our assignee or legal representative.

**Date :** 20 - April - 2016

| | Name | Signature & Date |
|---|---|---|
| 1 | Maniyar Jaimin Rajenbhai | _____ |

**(ii) Declaration by the applicant(s) in the convention country**

I/We, the applicant (s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative.applicant(s)

**(iii) Declaration by the applicant(s)**

I/We, the applicant(s) hereby declare(s) that:-

- ☑ I am/We in possession of the above mentioned invention.
- ☑ The provisional/complete specification relating to the invention is filed with this aplication.
- ☒ The invention as disclosed in the spcification uses the biological material from India and the necessary permission from the competent authority shall be submitted by me/us before the grant of patent to me/us.
- ☒ There is no lawful ground of objection to the grant of the patent to me/us.
- ☑ I am/we are the assignee or the legal representative of true & first inventors.
- ☒ The application or each of the application,particulars of each are given in the para 5 was the first applicatin in the convention country/countries in respect of my/our invention.
- ☒ I/we claim the priority from the above mentioned applications(s) filed in the convention country/countries & state that no application for protection in respect of invention had been made in a convention country before that date by me/us or by any person
- ☒ My/Our application in india is based on international application under Patent Cooperation Treaty (PCT) as mentioned in para 6
- ☒ The application is divided out of my/our application(s) particulars of which are given in para 7 and pray that this application may be treated as deemed to have been filed on _____under section 16 of the Act.
- ☒ The said invention is an improvement in or modification of the invention particulars of ehivh are given in para 8.

**10. Following are the attachments with the application:**

- [x] (a) Provisional specification/Complete specification
- [ ] (b) Complete specification(In confirmation with the international application) / as amended before the international Preliminary Examination Authority (IPEA),as applicable(2 copies),No.of pages.....No.of claims.....
- [x] (c) Drawings (In confirmation with the international application)/as amended before the international Preliminary Examination Authority(IPEA),as applicable(2 copies),No.of sheets....
- [ ] (d) Priority documents
- [ ] (e) Translations of priority documents/specification/international search reports
- [x] (f) Statement and undertaking on Form 3
- [ ] (g) Power of Authority
- [ ] (h) Declaration of inventorship on Form 5
- [ ] (i) Sequence listing in electronic Form
- [ ] (j) ..... Fees Rs.XXX in Cash /Cheque/Bank Draft bearin No.XXX Date: XXX on XXX Bank.

I/We hereby declare that to the best of my /our knowledge, information and belief the fact and mtters stated herein are correct and I/We request that a patent may be granted to me/us for the said invention.

Dated this **20** day of **April** , **2016**

| | Name | Signature & Date |
|---|---|---|
| 1 | Maniyar Jaimin Rajenbhai | _____ |

**FORM 2**
**THE PATENTS ACT, 1970**
**(39 OF 1970)**
**&**
**THE PATENTS RULES, 2003**
**PROVISIONAL SPECIFICATION**

**1. Title of the project/invention :**

Kalarav - The Step Towards Baby Care

**2. Applicant(s) :**

**Maniyar Jaimin Rajenbhai ( Indian )**
**Address : Computer Engineering , Vyavasayi Vidya Pratishthan's Sanch. College Of Engineering, Rajkot , Gujarat Technologycal University.**

**3. Preamble to the description :**

The following specification describes the invention.

**4. Description :**

**a. Field of Application / Project / Invention :**

The present project relates to a Child & Mother Care and, more particularly, the projects aims to help parents during perinatal period. It also provide service to find helping hand (nanny).

**b. Prior Art / Background of the Invention / References :**

Currently there is no such perfect system which provide all type of help need during perinatal care. In current system the knowledge is taken from family members or various different sites. For buying of baby product we would got to market. or other websites.

**c. Summary of the Invention/Project :**

The invention pertains to ways to facilitate the help during perinatal period. It help the parent from lady become pregnant to child become 10 years. One aspect of the invention involves the creation of such a web system which include all facilities at a one place. Another aspect of the invention involves the creation of the unique web store specially design for baby related items. Still another aspect of the invention involves the hiring system to find the helping hand for mother during & after pregnancy period.

**d. Objects of the Invention/Project :**

objects of project involves the system elements which help to run web application gracefully, The objects are Responsive GUI, A web server, Domain Name, Database server, and various online modules.

**e. Drawing(s) :**

50796_1_class diagrm

50796_2_activity diagram

50796_3_usecase kalarav

**f. Description of the Invention :**

1.1PROJECT SUMMARY

"Kalarav – The Step Toward Baby Care" project is basically design for helping a society via noble costs. I would make this website to answer the issue of 'How to take care of the infants & to help their parents? '. This website has various modules for what precautions should be made during pregnancy? ; How to take care of new born baby?, to buy best quality baby care product & to find helping hand for parents.

One can easily login to get any kind of information discussed above. Here the user is also facilitated with blog by which parents can know various things & discussion forum by which parents can solve any type of query by discussion.

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The main goal is to provide the best suggestion & care options to parents of new born baby or we can say that application helps new parents. Parents can take counselling also from online counselor. Application have a good team of writers for blog which writes various articles on Food, Diet, Baby Care, Mother Care etc.

1.2 PURPOSE: GOALS AND OBJECTIVES

My project named "Kalarav – The Step Towards Baby Care" is an Java EE based web application which provides information related to baby & mother care as well as system can help to find helping hand & have a fun part also for children. This system is to provide user friendly environment to search all type answers raise by parents regarding perinatal care issue.
In current online system there is no proper user interface for such functionality for discussion related to perinatal care. It only contains written blog articles not more than that. Sometimes it is boring task to read such articles online so my web app will remove this problem in good way by periodically counselling of parents & discussion forum.

In current manual system the pregnant lady may take suggestions from other ladies or elder women of family but it will lead to misguide sometimes. So one authenticated online system is needed which have all the module related from a lady became pregnant to child became 10 years. My project contains all module in one place so no need to check various website for various task.

**g. Examples :**

**h. Unique Features of the Project :**

There are following objectives those we try to provide in our applications which given below:

•Guide related to pre berth precautions
•Application used anytime and anywhere
•Online Photo Diary for storing good memories of child
•Parents can buy baby care products & toys.
•Parents can hire Baby Sitter
•Admin can do all type of Website management.
•Any registered user can post in blog and reply in discussion forum.
•Children can play online games which are design for brain development.

**5. Date & Signature :**

Date :20 - April - 2016

_____

Sign and Date

Maniyar Jaimin Rajenbhai

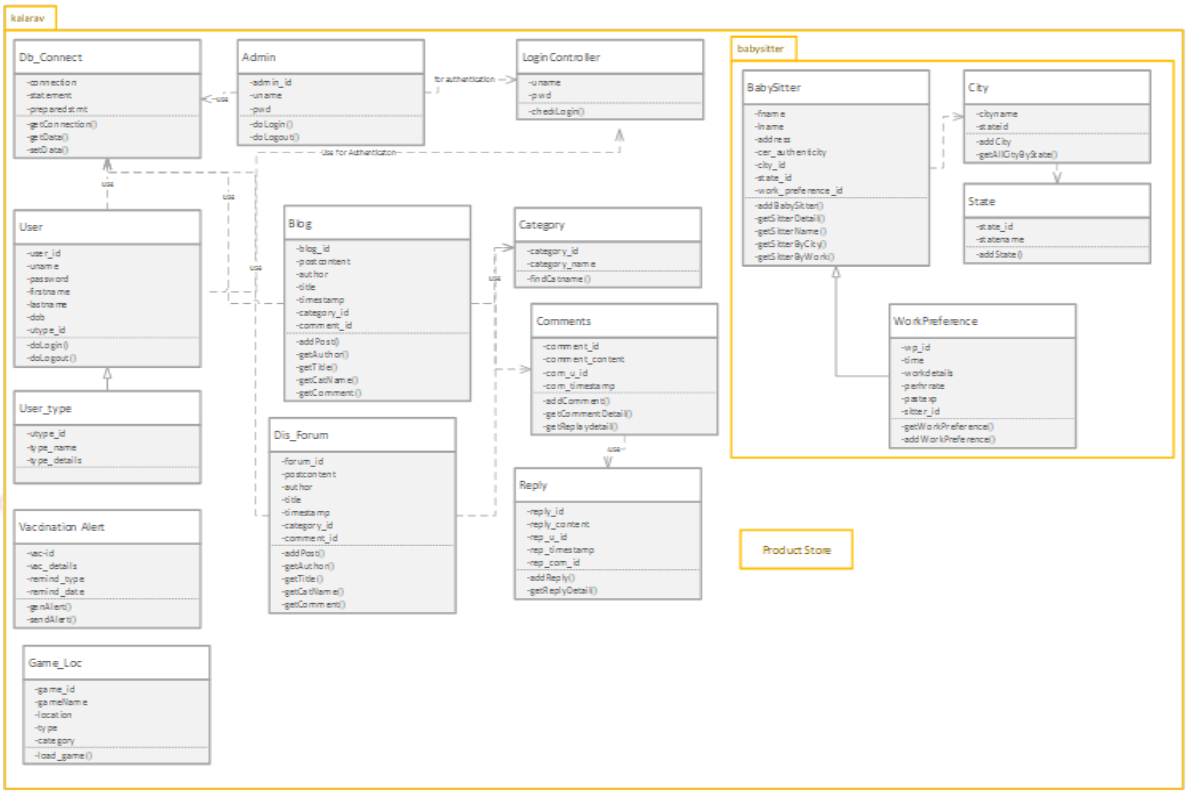
**6. Abstract of the project / invention :**

The main aim of this project is to build a Web application that helps the parents of new born babies i.e. I want to help the society with my web application. My web application has various features to help pregnant lady during pregnancy & after birth of child. It also contains an online store for purchasing of best quality products at low rate for baby & also provides an online baby-sitting service. The main features provided by the “Kalarav – The Step Towards Baby care” application are as follows:

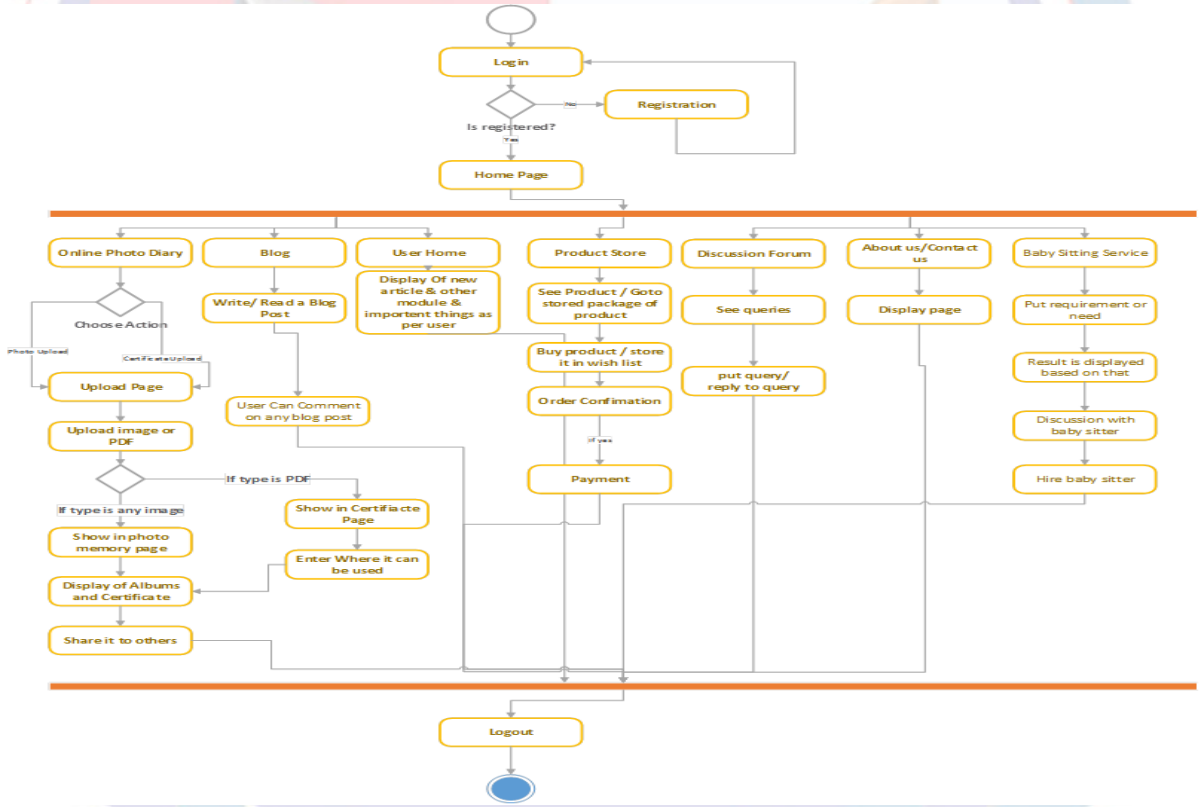
•Get online free guidance from best doctors, dietitians on food, diet, baby care, mother care etc.
•When new baby is born the details of baby is filled on online web portal by hospital staff which used for generating of birth certificate, vaccination card online.
•Vaccination reminder through SMS & E-Mail.
•Detailed description for new parents about what care should be taken during pregnancy and after pregnancy.
•Parents can buy the best quality products for baby at low cost.
•Parents can store record of baby of like eating habits, sleeping habit, family details, interests of baby, other health related details, etc.
•Parents can make an online photo diary for baby as to keep the ‘good memories from childhood’.
•It also contains a module for hiring a baby sitter whenever required.
•Functionality for growth of child
  - o E-kindergarten
  - o Fun parts for children.

## Drawing Attachments :

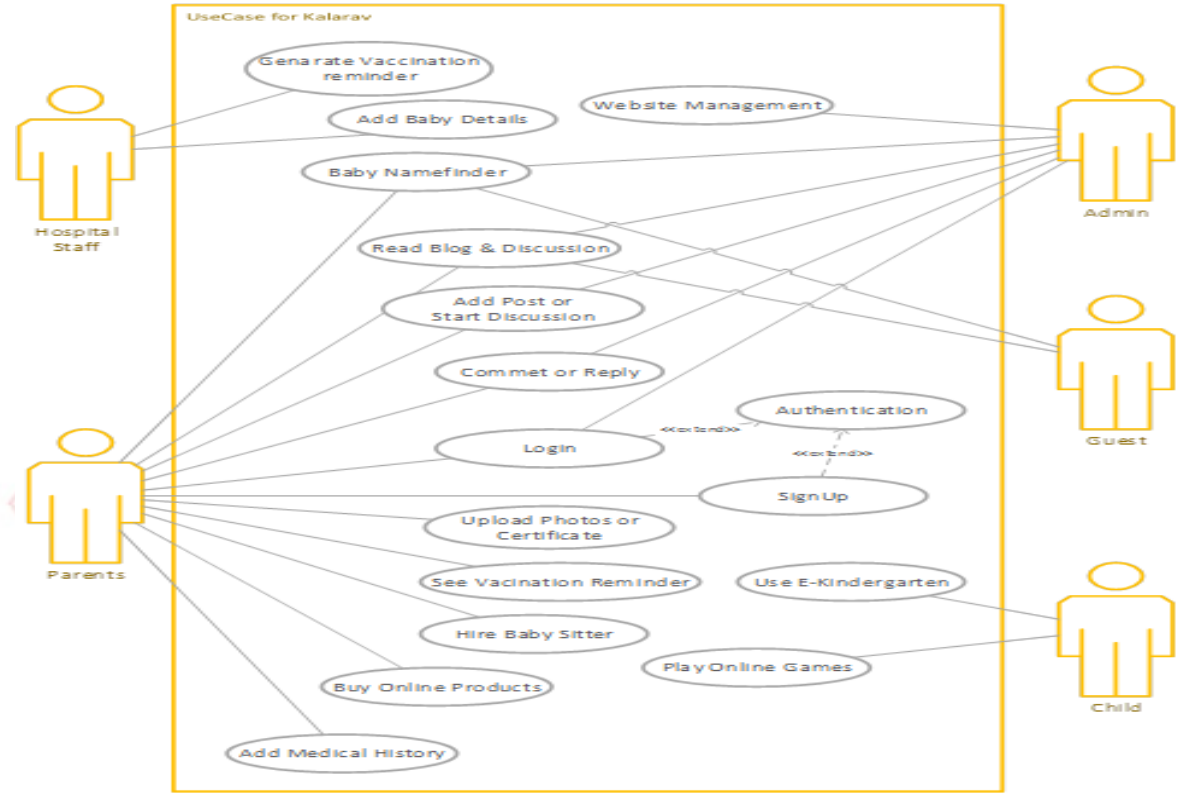
50796_1_class diagrm




50796_2_activity diagram




50796_3_usecase kalarav




समुचित ज्ञान समन्वय

**FORM 3**
**THE PATENTS ACT, 1970**
**(39 OF 1970)**
**&**
**THE PATENTS RULES, 2003**
**STATEMENT AND UNDERTAKING UNDER SECTION 8**

**1. Declaration :**

I/We, Maniyar Jaimin Rajenbhai ,

**2. Name, Address and Nationality of the joint Applicant :**

**Maniyar Jaimin Rajenbhai ( Indian )**
**Address :Computer Engineering , Vyavasayi Vidya Pratishthan's Sanch. College Of Engineering, Rajkot , Gujarat Technologycal University.**

Here by declare :

(i) that I/We have not made any application for the same/substantially the same invention outside India.

(ii) that the right in the application(s) has/have been assigned to,

| *Name of the Country* | *Date of Application* | *Application Number* | *Status of the Application* | *Date of Publication* | *Date of Grant* |
|---|---|---|---|---|---|
| *N/A* | *N/A* | *N/A* | *N/A* | *N/A* | *N/A* |

(iii) that I/We undertake that up to the date of grant of patent by the Controller , I/We would keep him inform in writing the details regarding corresponding application(s) for patents filed outside India within 3 months from the date of filing of such application.

Dated this **20** day of **April** , **2016**

**3. Signature of Applicants :**

_____
Sign and Date
Maniyar Jaimin Rajenbhai

To
The Controller of Patent
The Patent Office, at **Mumbai.**

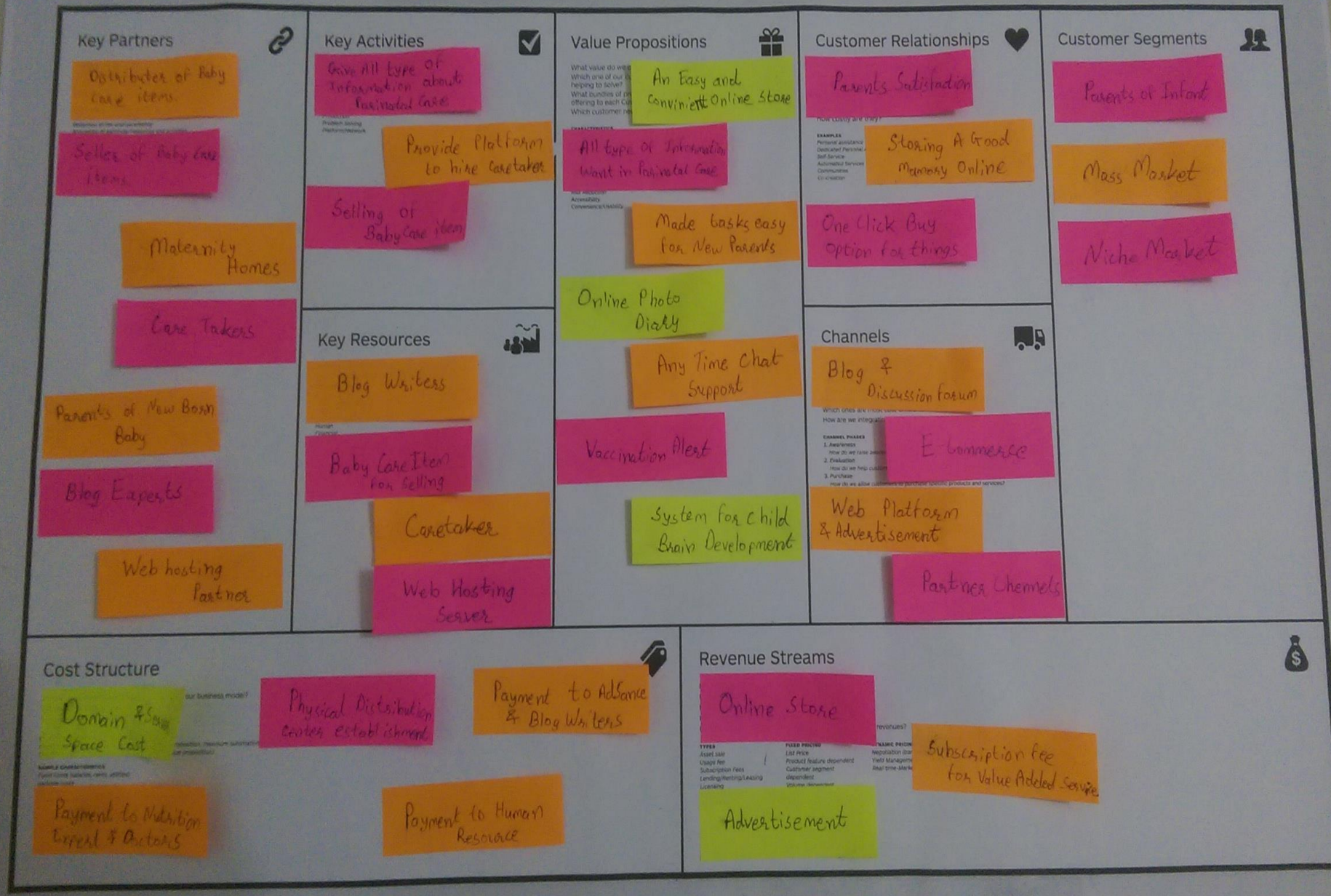
# The Business Model Canvas

Designed for: Kalarav - The Step Towards Baby Care

Designed by: Jaimin Mariyar

Date: 17/03/2016

Version:



# Business Modal Canvas Report On

# “Kalarav – The Step Towards Baby Care”

## Context & Introduction

The current project being undertaken is titled as “Kalarav – The Step Toward Baby Care” project is basically design for helping a society via noble costs. I would make this website to answer the issue of ‘How to take care of the infants & to help their parents? ’. This website has various modules for what precautions should be made during pregnancy? ; How to take care of new born baby?, to buy best quality baby care product & to find helping hand for parents.

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The main goal is to provide the best suggestion & care options to parents of new born baby or we can say that application helps new parents. Parents can take counselling also from online counselor. Application have a good team of writers for blog which writes various articles on Food, Diet, Baby Care, Mother Care etc.

- ✓ **Key Partners:-**

    - **Distributer: -** Distributers are the key distributer for our bay care item store. All distributer are responsible for distribute the things given to them for from sellers.

    - **Sellers: -** Sellers are the responsible providing the items to distribute the things to distributer which buyer buy from online store.

    - **Maternity Homes:-** They are responsible for entering details of new born baby to the website and they are responsible for managing vaccination alert report & management.

    - **Care Takers:-** Care Takrs are the human resource who are giving their service to customers of website.

- **Parent of Infant:-** Parents are the main key partner of the website whole website is dependent on the parents.

- **Blog Experts:-** Blog Experts are the human resource who maintain the blogging system of the website. In this there are Blog writers, Blog Editors etc.

- **Web Hosting Partner:-** Web hosting partner are responsible for giving web hosting to website. They are also responsible for managing web servers.

## ✓ Key Activities:-

- **Give Information: -** The main key activity on the website is to give best and all information related to perinatal care. Website also have discussion forum to solve any queries.

- **Hire Care Taker: -** A second key activity is parents can hire Care Taker online which is most convenient in now a days.

- **Selling of Baby Care Items: -** There is a store for buying a baby care products online. By this store I provide all the things related to baby & mother care.

## ✓ Key Resources:-

- **Blog Writers:-** They are responsible for writing and editing of blog.

- **Baby Care Items: -** The Items for online store is needed.

- **Care Taker: -** Registration of caretakers are required for online hiring system of care taker.

- **Web hosting server: -** It is the most important resource without it nothing is possible.

## ✓ Value Propositions:-

- **An Easy & Convenient Online Store: -** The online store is vary easy and convenient to parents. It has a feature like one click buy for saved option and that order can be repeated on schedule so parents have no worry once they buy and set options no things to worry.

- **All type of information for Perinatal Care: -** The website give clear instruction for all things need in perinatal care. It is very informative than other websites.

- **Online Photo Diary:-** By this parents can store good memories of child on website and they also can store all small details of child which can be used in future in case of any big health issue.

- **Any Time Chat Support:-** This feature is used when parents want any help for their queries in emergency. The doctors are there to answer.

- **System for Child's Brain Development:-** It is a value proposition for the development of child's brain by various activity like puzzles & games.

## ✓ Customer Relationship:-

- **Parents Satisfaction:-** The website provide all the things related to perinatal care so parents need not go to anywhere. Website will give all things so parents will remain happy.

- **Storing Memory Online:-** The good memories are always make a person happy so it is the good way to provide a Online Photo Diary.

- **One Click Buy: -** The online store is vary easy and convenient to parents. It has a feature like one click buy for saved option and that order can be repeated on schedule so parents have no worry once they buy and set options no things to worry.

## ✓ Channels:-

- **Blog & Distribution Forum:-** By this channel we convey all the information which we want to give to parents.

- **E – Commerce: -** By this channel we provide the good baby care items to our customer.

- **Web Platform & Advertisement: -** By this all the website data is manage online.

- **Partner Channels:-** This would be used to enhance the promotion of website. As well as this channels are use for expansion of business.

## ✓ Customer Segments:-

- **Parents of Infant: -** This is the main customers of the website.

- **Mass Market: -** This segment describe that the local mass are also part of this business.

- **Niche Market:-** This segment includes that there would be some selected kind of people involved in communication

## ✓ Cost Structure:-

- **Domain Cost & Server Space Cost:-** This would be included in the cost structure as we need to buy domain & server space for the web site.

- **Physical Distribution Centre:-** We need to establish the physical distribution centre for distribution of things so cost structure also include this.

- **Payment to Adsence & Blog Writers: -** We need to include the payment to Google Adsence & Blog Writers in cost structures.

- **Payment to Human Resource:-** The payment to human resource are included which include the payment to human resource which are responsible for website management.

## ✓ Revenue Streams:-

- **Online Store: -** The Main revenue stream for website business is this online store. By this 60% of revenue is generated.

- **Advertisement:** - We give advertisement to our website by which we generate 30% revenue.

- **Subscription Fee for Value Added Services:-** The 10% of revenue is come from here. It is taken for extra facility acquire by customer.

# REFERENCES

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- www.firstcry.com
- Childindia.org.in
- www.bootsnipp.com
- W3schools.com
- www.babycenter.in
- www.parenting.com


## Books


- Java the Complete Reference 9th Edition

  -by Herbert Schildt

- Software Engineering A Practitioner's Approach 7th Edition

  -by Roger Pressman