Student Helper Portal

Software Requirements Specification

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Revision History

Date	Revision	Description	Author
	1.0	Initial Version	

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1. Purpose

The main objective of the document is to illustrate the requirements of the Student helper Portal. The document gives us detailed description of both functional and non-functional requirements of the system.

1.1. Scope

Scope of the proposed system is to provide a platform where
- University students can connect with other students

- Students can collaborate with other students' projects

- Upcoming events showcase

- Student Discussion Forum

- Lecture notes and academics related document sharing

1.2. Overview

Student Helper Portal would be able to provide all in one platform for university students. Students can share their academics related documents along with lecture notes with each other. Professors can share lecture recordings, Examination schedules and can arrange doubt clearing sessions.

There is an Event showcase section, in which all upcoming Tech-Fests, Hackathons and Competitions related information will be available so that events reachability will be more.

Students can connect with other students easily by collaborating in projects, forming coding groups, solving other students doubts, sharing their interview experiences and their preparation and roadmaps for placements. A Student Discussion Forum is a special section made for this purpose.

At last, Student feedback section is present for the students to request a new feature or improvement of the app.

2. Overall Description

2.1. Product Perspective

Our proposed portal will help students to connect with other students easily,.Our portal will have features like student discussion form, more event accessibility and easy of registration, ease of books exchange and would help in notes sharing.

2.2. Product Functionality/Features

The system will have users such as:
- Students
- Administrator

Major functionality of system will include:
- User Authentication based on University
- User Profile
- Events showcase
- Student Discussion Forum
- Post reactions (upvote, downvote and comments)
- Lecture Notes and Recordings
- Project Collaboration which includes chats feature
- Doubt clearing sessions by faculties
- Coding groups
- Student Feedback section
- Academics and Tech Blogs
- Personalized recommendations of blogs, forums, events and profiles

2.3. User Characteristics

The users who will be using this system must have login ID and password. Also the users must have knowledge of the internet.
The student who will be using this system must have valid University mail ID and password.

There will be two different users who will be using this system:
- University Student
- Administrator

2.4. Constraints

The product will be supported by Android and iOS operating system.
- All Android versions android 5 and above.
- All iOS versions iOS 9.0 and above.

2.5. Assumptions and Dependencies

The proposed system needs an internet connection on the client side. It needs the following third party products on the server side:

- SQL Server
- Java Framework
- IIS

3. Specific Requirements

3.1. Functional Requirements

3.1.1 Customer's Requirements

3.1.1.1 Login
1.   To login into the system, the following details are required:
   - 1.1.   Email Address – must be a valid email address
   - 1.2.   Password – Must have at least 8 characters, the text field must be in password mode.

3.1.1.2 Create Account
1.   The customers can register themselves for the shipping site.
2.   For registering, the following information are required:
   - 2.1.   Email address –must be a valid email address
   - 2.2.   Password – Must have at least 8 characters, the text field must be in password mode.
   - **2.3.**   **Contact Details**
     - 2.3.1.   Name
     - 2.3.2.   Current Location
     - 2.3.3.   Mobile
     - 2.3.4.   Mailing Address

Upon successful registration, this information will be stored in the database.

3.   **Manage Profile**
- 3.1.   The customers can update their profile information whenever required.
- 3.2.   All the fields mentioned above will be updatable except the email address.
- 3.3.   This changed information will be updated to the database on successful updation.

3.1.1.4. Search for a type of shipment
1.   The customers can search for shipments they want to send to.
2.   The shipments can be searched by type of shipments listed.
3.   Some special shipments can be searched based on keywords and location.

3.1.1.5. Add a shipment
1.   The customers can add the details of the shipments they want to send.
2.   Take all the compulsory information about source and destination company (i.e. company name, contact name, contact title, country, city, full address, contact no., fax no.).
3.   Take all the information of the product that is delivered(i.e. product description, quantity of product)
4.   The customer can also choose the mode of transport from the list item like by road, by air or by water according to convenience.
5.   The customer has to specify the receiving date of product and delivery date of product.
6.   In case, the customer has choosen pick-up service, then the customer has to specify the pick up date and time, so that one

of the employee from the shipment company can go and collect the same.

7. Customer has to specify the approximate weight of the shipment depending on the type of the shipment, so that price can be calculated for the same.

8. Customer can specify some specific functionality like time-sensitive service i.e. fast service of shipment.

9. Customer will get a consignment number which is a unique number per shipment ordered.

10. An invoice number will also be generated for the same.

3.1.1.6. Search for a shipment

1. The consignment number obtained while adding the shipment can be used to track the shipment.

2. The invoice number obtained can also be used to track the shipment.

3. The customer can view the entire shipment details like where the shipment is at present.

4. The customer can view the status of the shipment like whether its on load, is dispatched, is delivered etc.

3.1.1.7. Payment Service

1. After adding a particular consignment, the customer will be directed to payment options.

2. The customer can select the modes of payments like credit card, debit card or online banking.

3. The customer can have the facility to give the payment when shipment pick up will happen.

4. The customer can have the facility to give the payment when the shipment is delivered to the concerned receiver.

5. According to the number of times, the customer has ordered for the shipment service, the customer can get a discount as well.

6. Also on ordering more number of shipments at a time, the customer can get a discount.

3.1.1.8. Forgot password/ Change password

1. The customers can retrieve their passwords in case they forget it. The users will be asked to submit their email address and the password will be sent to this email address.

2. The user can change their passwords as per their requirement. For this, they will have to enter their old password and new password. The new password also must be at least 8 characters in length.

3.1.1.9. Receive notifications on changed status of shipment

3.1.1.9.1 Whenever the shipment status is changed by the administrator of the shipment company, the customer will get a notification.

3.1.1.10. View Shipment history

3.1.1.10.1 The customer can view the shipment history of all the shipments till now added by the customer.

3.1.1.10.2 The customer can sort out the shipment history with the help of shipment dates, type of shipment, cost etc.

3.1.1.11. Clear Shipment history
3.1.1.11.1 The customer can delete the shipment history of all the shipments till now added by the customer.

3.1.1.12. Log a complaint
3.1.1.12.1 The customer can log a complaint onto the system if some inconvenience is faced by the customer.

3.1.1.12.2 In accordance with the complaint, a complaint number will be generated which can be used by the customer to track it.

3.1.1.12.3 The customer can also close the complaint if the complaint is resolved.

3.1.1.13. Request for report generation
3.1.1.13.1 The customer can request for report generation of the shipments added by him/her.

3.1.1.13.2 The customer sort the output of the report for the type of shipment, the dates of order or delivery, cost or receiver name.

3.1.1.13.3 The customer can get the report in format specified like PDF, XLS etc.

3.1.1.14. Details of crew
3.1.1.14.1 The customer can look into the details and past work experience of the crew members who are working on the dispatch and loading of the shipment.

3.1.1.14.2 The customer can opt for any specific crew member as well on the basis of past experience.

2. Administrator's Requirements

3.1.2.1 User Management
The administrator can manage the customers of the system Administrator can:
1. View the details of the customers
2. Email any particular customer
3. Delete any customer
4. Activate/ Deactivate any customer

3.1.2.2 Shipment Management

3.1.2.2.1 The administrator can update shipment information.

3.1.2.2.2 It can update the status of the shipment and send a email to customer regarding the shipment status change.

3.1.2.2.3 It can also update the information of crew member working on the particular shipment and hence a email will be sent to the crew member regarding the allocation/deallocation of the shipment.

3.1.2.2.4 The administrator can also delete a shipment.

3.1.2.3 Ad Management
1. Administrator can manage the advertisements placed on the website.
2. Placing the ads and removing them at specific time intervals is administrator's job.
3. For this the google ads feature is used.

3.1.2.4 Pricing/Discount Sessions

3.1.2.4.1 The administrator can also provide special discount sessions during festival seasons.

3.1.2.4.2 The administrator can provide a particular customer with special discount sessions based on the collaboration of the customer with the company.

3.1.2.5 Report Management – Statistics of customer/shipment/crew member
Administrator can also view various reports likely:
1. Statistics of customers in the site
2. Statistics of shipments in the site
3. Statistics for the crew members working with the company.

2. Employee's Requirement
1. Create account
1.1. The employees can register themselves online. The following details are required for the registration process:
- 1.1.1. Email address – Must be a valid email address
- 1.1.2. Password – Must be at least 8 characters in length and the text field must be in password mode.
- 1.1.3. Educational Qualification
- 1.1.4. Past experience
- 1.1.5. Address
- 1.1.6. Country
- 1.1.7. State
- 1.1.8. City
- 1.1.9. Pin code
- 1.1.10. Contact number

1.2. Generates a unique ID for each of the employee.
1.3. This part also works for the different categories of employees for ex. Delivery boy, marketing executive etc. to keep track of their performance.

Upon successful registration, this information will be saved in the database.

2. Manage company profile
The employees with admin rights can manage the company information change, or can display some important information onto the company site.

3.1.3.3 Shipment Management
3.1.3.3.1 The administrator can update shipment information.

3.1.3.3.2 It can update the status of the shipment and send a email to customer regarding the shipment status change.

3.1.3.3.3 They can update the new location of the shipment as well.

3.1.3.3.4 After the shipment has been delivered to the recipient, they can put comment that the recipient has paid for the shipment, so that customer can have the information about it.

3.1.3.4 Process complaints
3.1.3.4.1 The employees can see the logged complaints from the customers.

3.1.3.4.2 They can contact the customers through phone, e-mail and get in contact with them regarding the complaint.

3.1.3.4.3 After the complaint gets resolved, they can close the complaint.

3.1.3.5 Search for shipments

3.1.3.5.1 The employees can search for shipments and can check the status of the shipments.

3.1.3.5.2 They can search on the basis

- Type of shipment
- Date of dispatch
- Date of delivery
- Priority shipment
- Customer name

6. Forgot password/ Change password

6.1. The employees can retrieve their passwords in case they forget it. The users will be asked to submit their email address and the password will be sent to this email address.

6.2. The user can change their passwords as per their requirement. For this, they will have to enter their old password and new password. The new password also must be at least 8 characters in length.

3.1.3.7 Order Loading Process

3.1.3.7.1 Collect all the goods on to the port.

3.1.3.7.2 Now preparing a list of those goods that is to be delivered to the same destination port and have approximately same delivery date.

3.1.3.7.3 Preparing a list of container that in every container puts what kind of goods (i.e. a container may be exists different orders)

3.1.3.7.4 Date and time of the loading of a container

3.1.3.7.5 Name of the employees who are goes with the container

3.1.3.8 Order Delivery Process

3.1.3.8.1 Date and time of the dispatching of the goods on the destination.

3.1.3.8.2 Dispatching of the product on that occasion till full payment is found.

3.1.3.8.3 Take a receipt of delivering goods to the recipient at the time of dispatching of goods.

3.2. External Interface Requirements

3.2.1. Software Interfaces

Database Management System: SQL Server
Java Run Time Environment
Eclipse/Net Beans
Technology: Java Script, JSP, HTML, CSS

3.2.2. Communication Interfaces

➢ The proposed system needs internet connection.
➢ The HTTP protocol will be used to facilitate communication between client and server.

3.3.   Design and Implementation Constraints

Database accuracy and data retrieval speed:
The online central database and offline database should be synchronized at particular intervals.

4. Non-Functional Requirements

4.1. Security and Privacy Requirements

4.1.1. Authentication
- ➢ Only authenticated users will be allowed to place orders for shipping orders, monitor their orders, make payment online etc.
- ➢ The unauthenticated users will only be allowed to browse through the site and can see the services provided by the system.
- ➢ The security will be based on the simple password protection.
- ➢ There wil be captcha if the user forgets the password and the recovery of the password will be sent to the user via link in the backup mail ID.

4.1.2. Authorization
- ➢ Security needs to be checked on the applicable pages to prevent URL manipulations.

4.1.3. Privacy
- ➢ The orders placed by a particular user can only be seen by the user itself.

4.2. Computer Resource Requirements

4.2.1. Computer Hardware Requirements
Server side:
- Pentium 4 processor
- 80 GB HDD or higher
- 512MB RAM or higher
- NIC

Client side:
- Pentium processor
- 256MB RAM or higher
- Internet Connection

4.2.2. Computer Software Requirements
Server side:
- Java Framework
- Windows 2000 or later version
- MS SQL 2008

Client side:
- Browser