

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
- Faculties

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
- Faculties

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:

- Firebase database

3. Specific Requirements

3.1. Functional Requirements

3.1.1 Student'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 concerned university email address.
 - 1.2. Password – Password not required as we implemented google auth.

3.1.1.2 Create Account

1. The students can register themselves for the student helper portal.
2. For registering, the following information are required:
 - 2.1. Email address – Email address will be retrieved from google auth.
 - 2.2. Password – Password is not required as we implemented google auth.

2.3. Contact Details

- 2.3.1. Name
- 2.3.2. Mobile
- 2.3.3. University Mailing Address
- 2.3.4. Current Academic details
- 2.3.5. Github Id - (only for project collaboration optional)

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

3. Manage Profile

- 3.1. The students can update their profile information whenever required.
- 3.2. All the fields mentioned above will be updatable except the email address and name.
- 3.3. This changed information will be updated to the Firebase database on successful updation.
- 3.4. Every year students have to manually update their semester.

3.1.1.4. Search for various categories

1. The students can search for a specific category like projects, notes, assignments, events etc.
2. The students can search for lecture notes and recordings, assignment etc. by typing keywords or by course code and name.

3.1.1.5. Add/Edit project

1. The students can add the details of the project which they wish to commence.
2. Take all the necessary information required for the project i.e. project title, project description, project status (yet to start/ongoing/completed), project deadline (optional), project collaborators etc.
3. Project reactions
4. Project sharing via url in personal chat or any social media platform (through link) downloading button (zip)
5. Project timeline (versions, improvement, feature addition, etc.)
6. Specify project details and required developers
7. Students' projects will have an unique project id and it will be generated automatically.

3.1.1.6. Project Collaboration

1. Project collaboration (project specific) chat
2. Project invitations/ collaboration
 1. Project collaboration invitation can be shared by selecting specific student.
 2. Project collaboration request (accept/reject)

3.1.1.7. Student Discussion Forum

1. Academics related questions
2. Questions answers reactions

3. Answers filter based on most upvoted and most recent
4. Shareable question link
5. Questions filters based on tags (subjects and courses)
6. Trending questions and tags

3.1.1.8. Update personal and academics details

1. Semester updations every 6 months
2. Branch updation
3. Mobile number
4. Minors and Electives subject addition

3.1.1.9. Receive notifications on project-collaboration / post-reactions

- 3.1.1.9.1 Push notifications will be sent upon project collaboration invitations, Post reactions and forum interactions.
Push notifications contains quick actions like accept invitations, like chats

3.1.1.10. Upcoming events showcase

- 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. Tech and Academic blogs

- 3.1.1.11.1 The customer can delete the shipment history of all the shipments till now added by the customer.
Student blog upload
Teacher motivational/Inspirational story upload
Notes/lecture notes
Assignments

3.1.1.12. Log a complaint / give feedback / feature request

- 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 doubt clearing sessions

- 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 students and faculty profile

- 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.

1. Create coding groups and participate in contests

test text here... test test test ..

2. Faculty'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. Administrator's Requirements

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.