

ATU PROJECT

ONLINE POINT SHARING PLATFORM

ARKANSAS TECH UNIVERSITY



Introduction

Developing a web application that helps Professor to manage students' points and students use that points to bid products. Students share their their points with other students to help him/her to bid the products.

Main purpose is to give a better place where Professor gives points to students according to their performance in class and also make them motivate to study hard that they earn points and bid the products what they wants.

Points given by Professor motivates students because if students want something , they study hard, give their best in the class to earn points.

Our main objective to provide a better idea to motivate himself/herself to study hard and give a better performance.

Technology Review

MEAN Stack

MEAN Stack is user friendly full stack JavaScript framework, ideal for building dynamic websites and applications. MEAN is an acronym for MongoDB, ExpressJs, AngularJs and Node.js . From client to server to database, MEAN is full-stack JavaScript.

- **Node.js** is server side JavaScript execution runtime. It's a platform built on Google Chrome's V8 JavaScript runtime.
- **ExpressJs** is lightweight framework used to build web application in Node. It provides a number of robust features for building single and multi page web application.
- **MongoDb** is schemaless NoSQL database system. MongoDB saves data in JSON format which makes it easier to pass data between client and server.
- **AngularJs** is JavaScript framework developed by Google. It provides some awesome features like the two way data binding. It's a complete solution for rapid and awesome front end development.

WebStorm

WebStorm is an awesome IDE for working with JavaScript web and app development. WebStorm has support for many JavaScript frameworks. It has native support for Nodejs, Angularjs, Reactjs, Vuejs and many more. It has intelligent auto completion and very easy to use UI. Overall it is a must have tool for JavaScript Developers.

Web Application Users

Professor

Every professor in the university will have access to his account on this web application. All functionalities are mentioned below : -

- Professor can login to web application using his credentials.
- Professor can create class and share CLASS CODE with students so that they can join the class on this platform.
- Professor can view all registered students along with their basic info and points in his classes.
- Professor can add or deduct student's points.
- Professor can view all notifications on the platform.
- Professor can view his transactions such as adding or deducting points to student's account.
- Professor can view his profile page and can update his basic profile info.
- Professor can logout from the web application.

Student

Each and every student in the university will have access to his/her account on web application. All functionalities are mentioned below : -

- Student can login to web application using his/her credentials.
- Student can view his total points at the dashboard.
- Student can view all his already joined subject and his points in that particular subject.
- Student can join a new subject using CLASS CODE shared by Professor.
- Student has access to E-Shop where he can buy and sell products using his/her points.
- Student can view all notifications on the platform.
- Student can view transactions of his points.
- Student can view his profile page and can update his basic profile info.

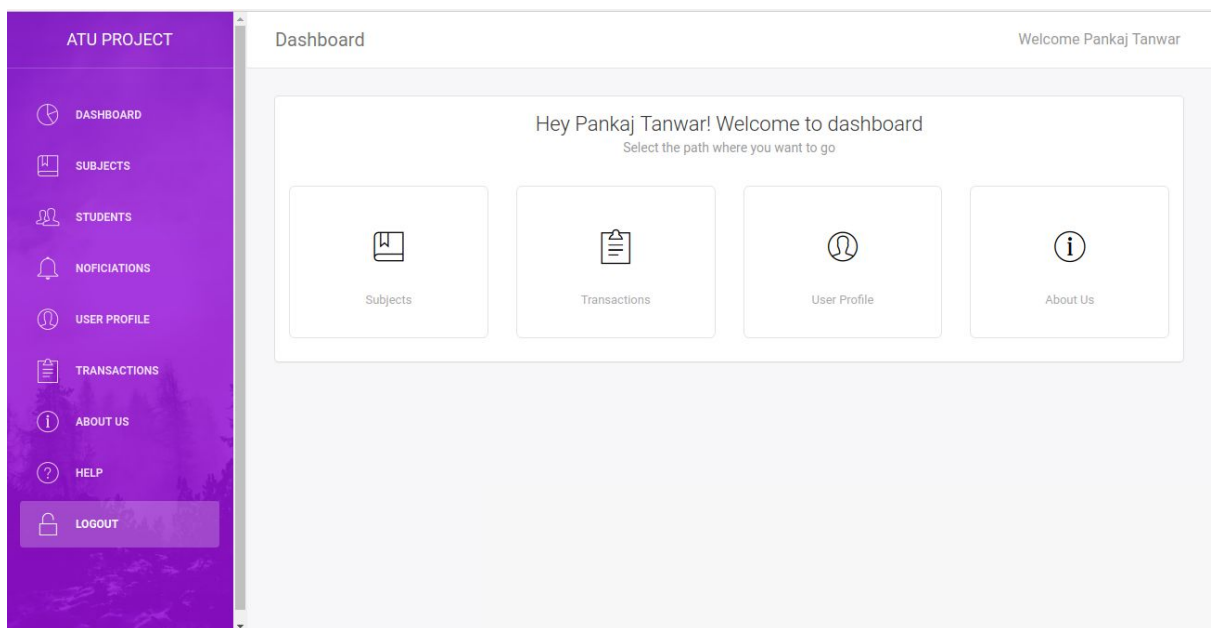
Functions of Web Application

Professor

All functions of the web applications that are accessed by Professor are mentioned below :-

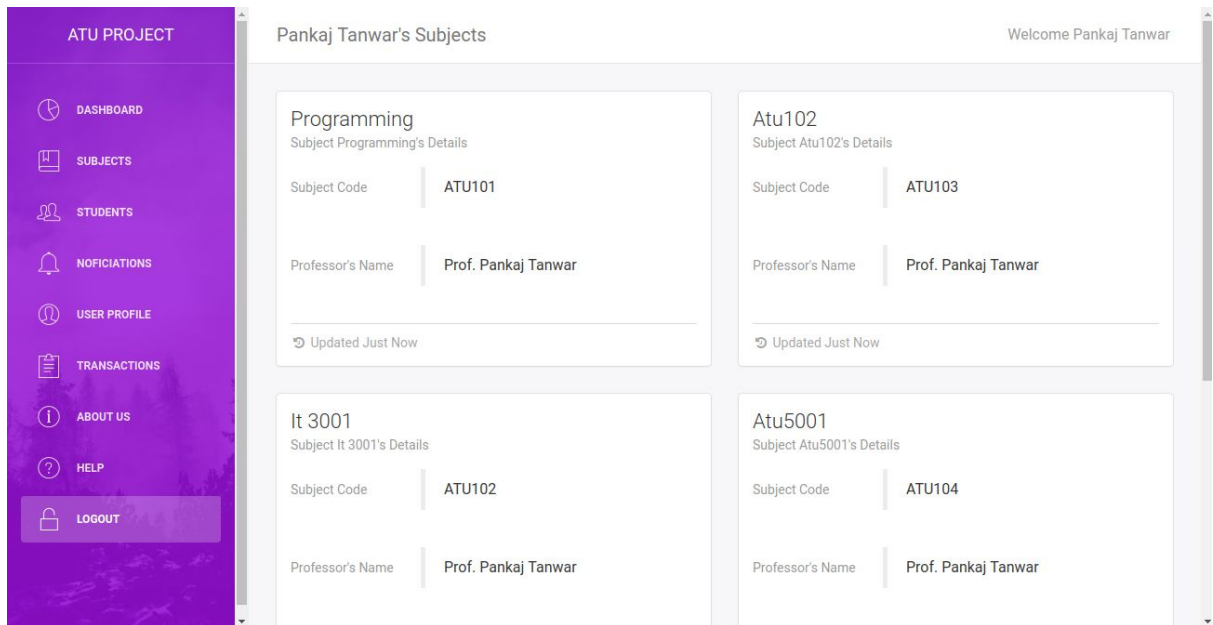
★ Dashboard Page :-

After logging in to the web application, Professor get a welcome dashboard screen. Dashboard page has four routes, Subjects, Transactions, User Profile and About Us.



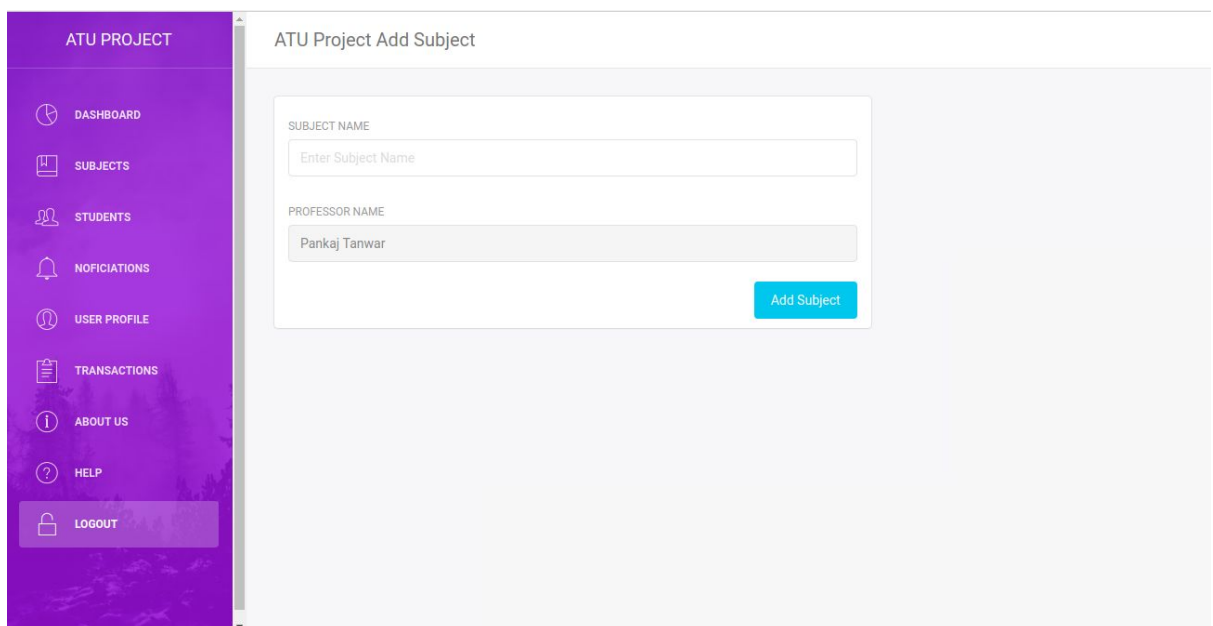
★ Subject Page :-

Professor can view all his subjects that he has created along with their CLASS CODE. Professor can create a new class also and can share it's CLASS CODE with students so that they can join the class.



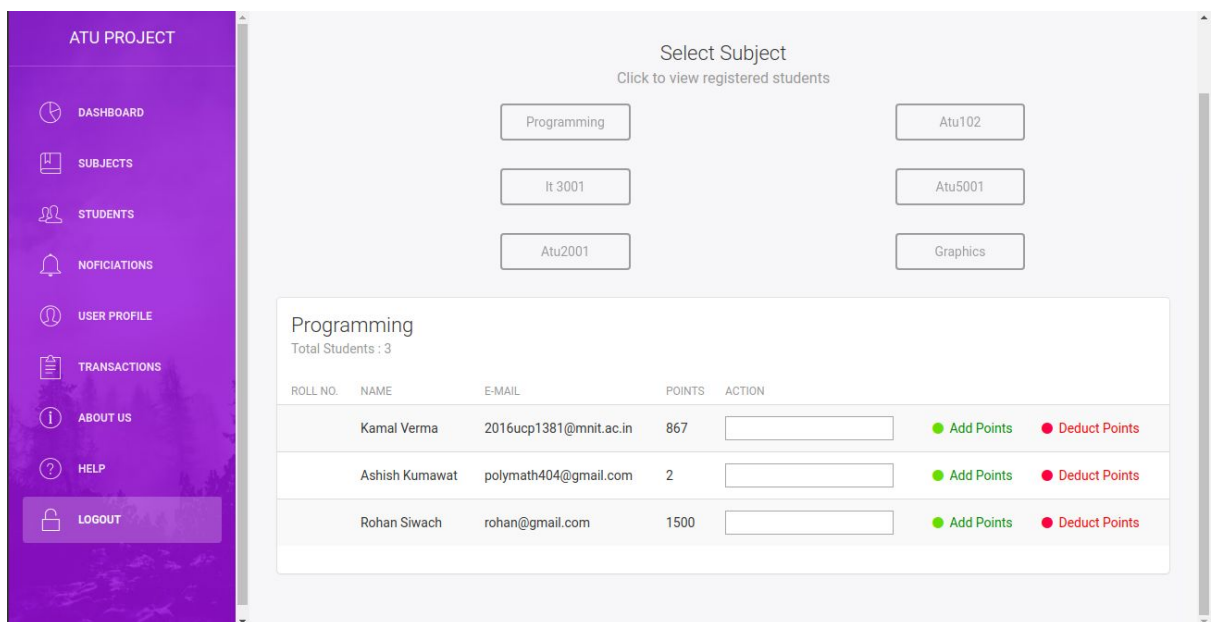
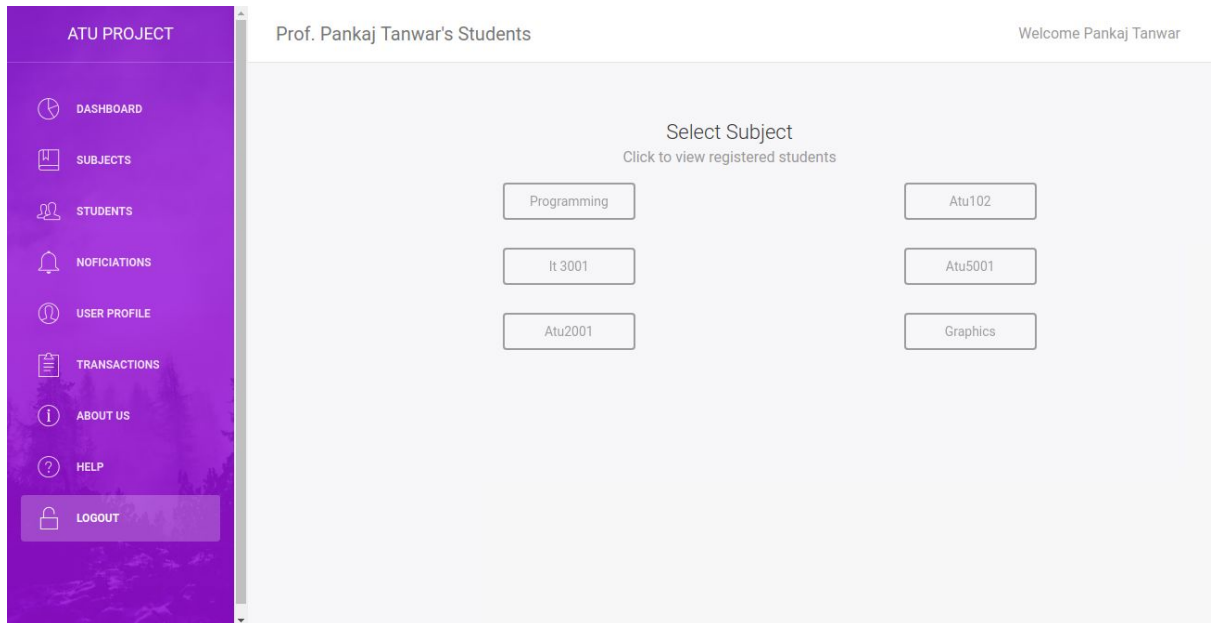
★ Add New Subject Page :-

Professor can add new subject by entering it's name and system will generate a unique new CLASS CODE for it.



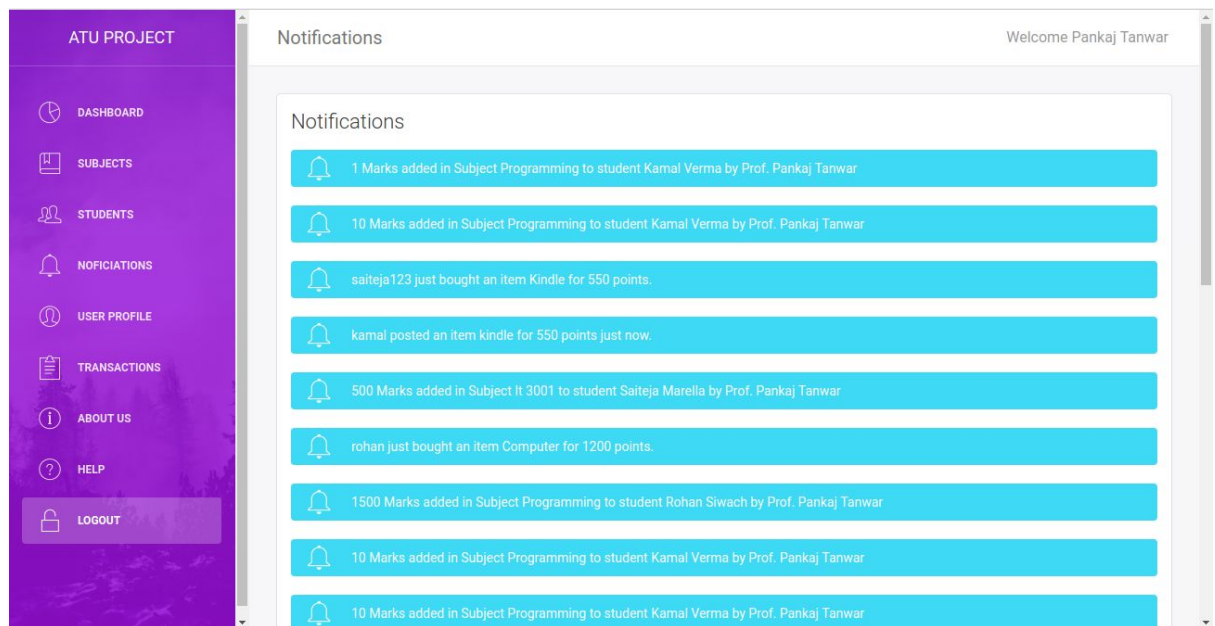
★ Students' Page :-

Professor can view all his registered students in his class by clicking on the name of the class. After clicking, he can view all registered students in that class along with their basic info and points. Professor can add or deduct points from students' account.



★ Notification Page :-

Professor can view all the notifications on the web applications as any student got added some points or someone sold a product etc.

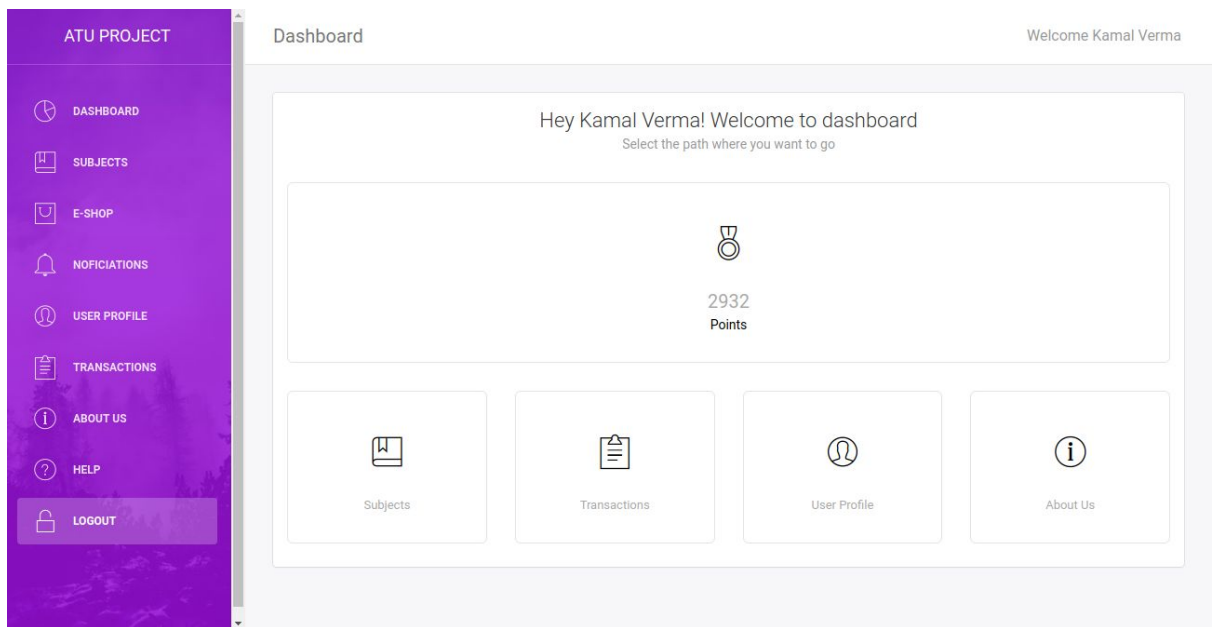


Student

All functions of the web applications that are accessed by Student are mentioned below : -

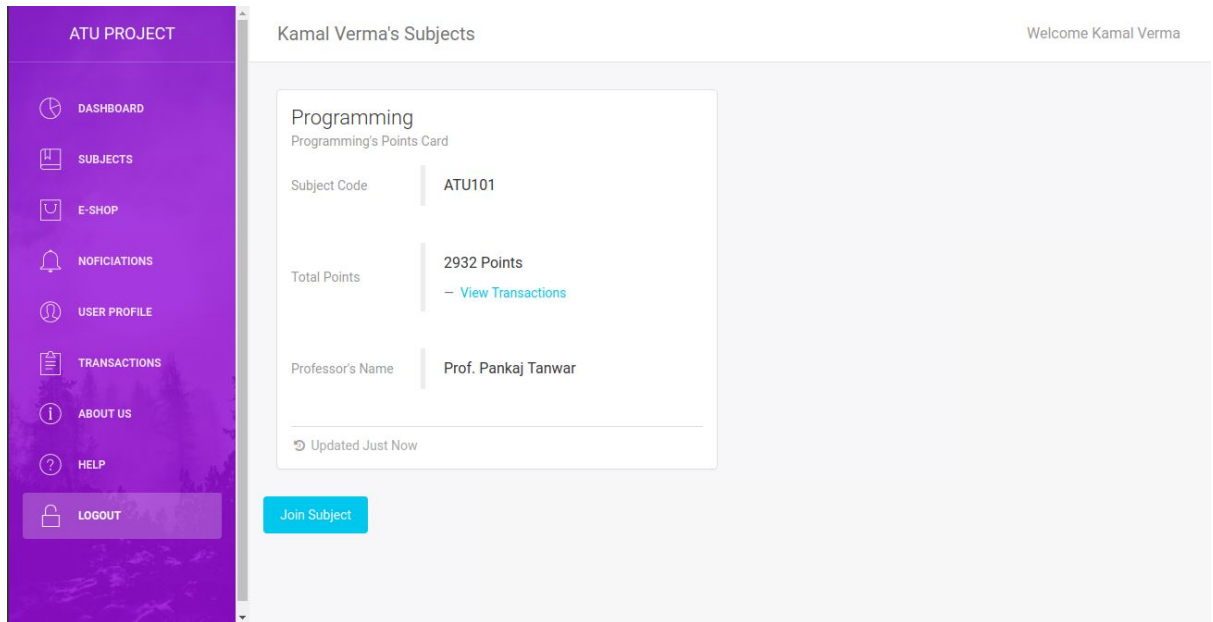
★ Dashboard Page : -

On the Dashboard page along with a welcome screen student can view his total earned points. Students also has four routes on this page - Subjects, Transactions , User Profile and About Us page.



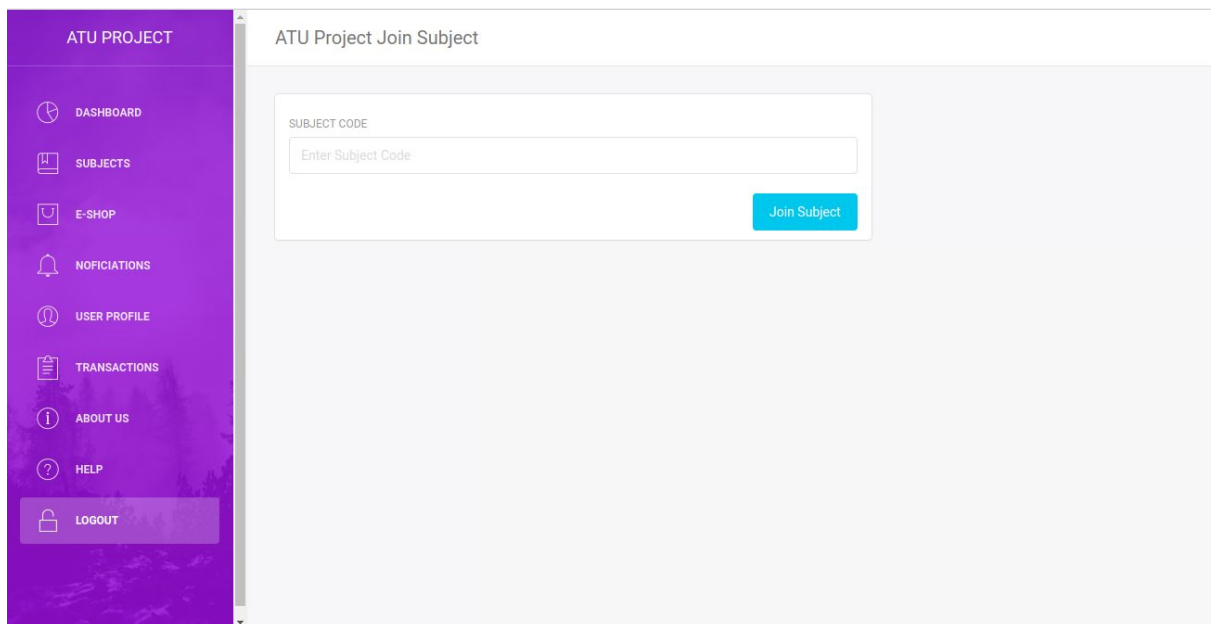
★ Subject Page : -

On Subject page student can view all his subject that he has joined using CLASS CODE, shared by Professor earlier along with his points in that particular points. This page also has a Join subject button.



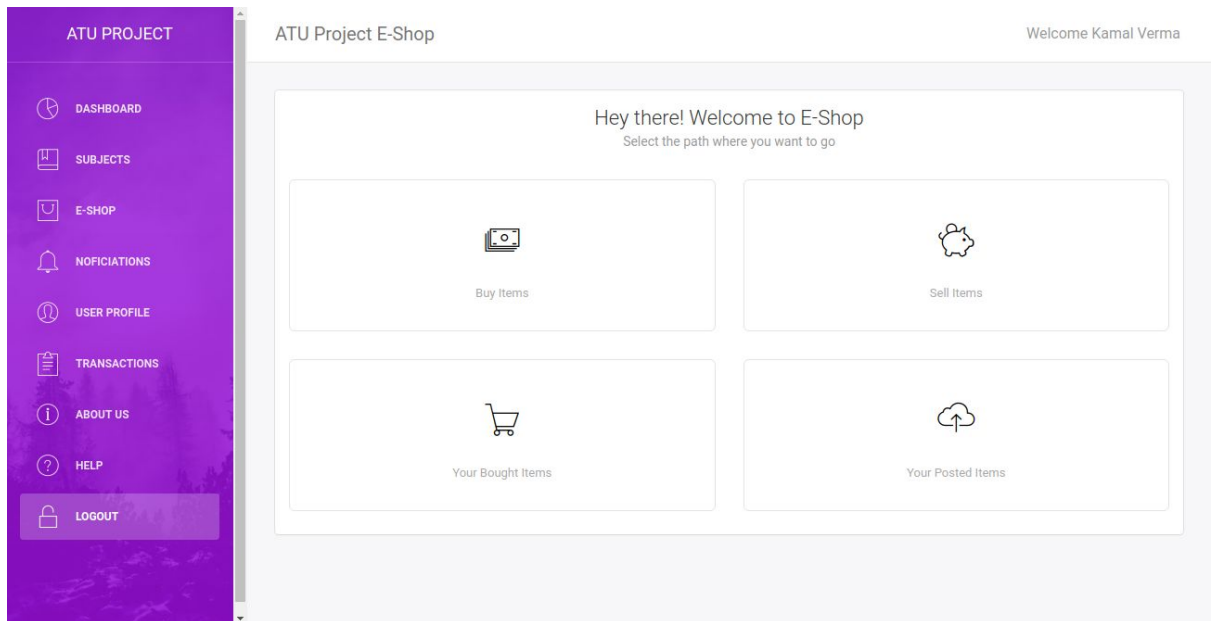
★ Join Subject Page : -

Subject page has a join subject button at the bottom. After clicking that button student will be redirected to a new page where he can join a new class using CLASS CODE shared by his professor.



★ Student E - Shop Page : -

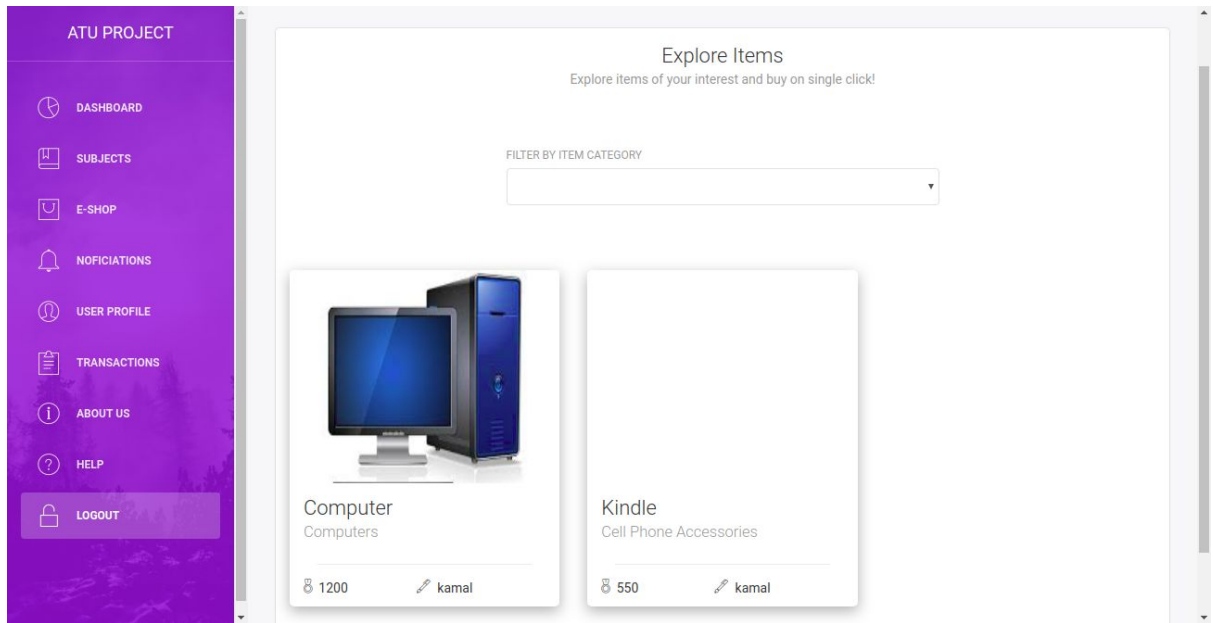
Each student has access to Student E - Shop where he can buy or sell products using his earned points. On E -Shop page student can view four routes for Buy Items, Sell Items, Bought Items and Posted Items.

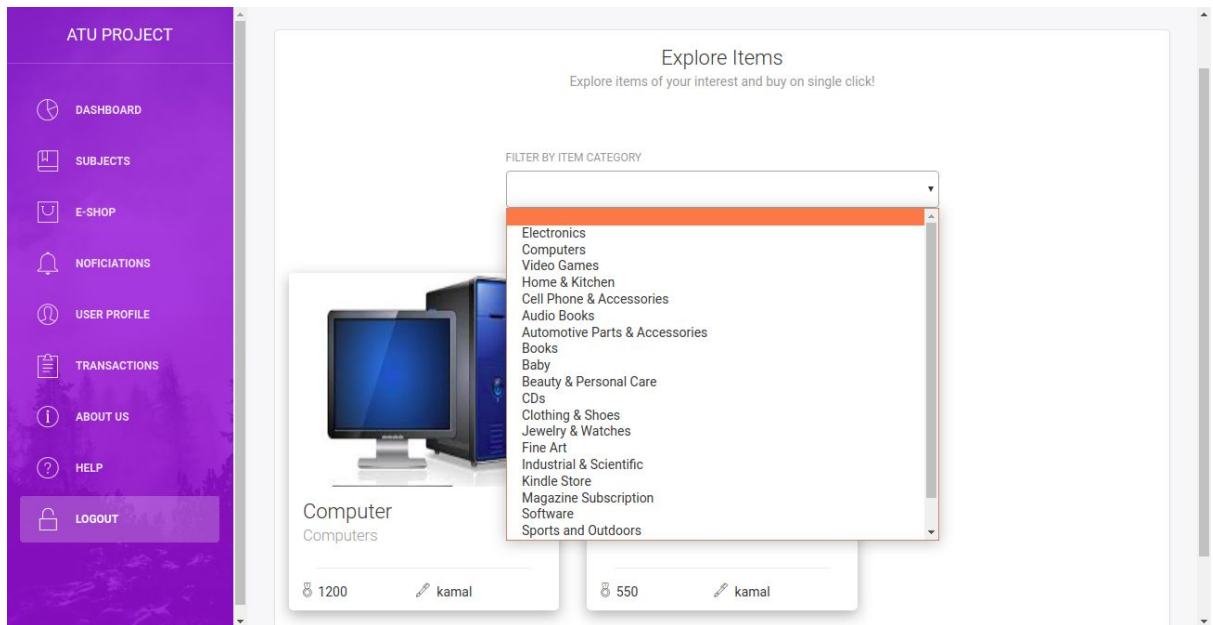


★ Buy Items Page : -

After clicking on Buy Items, student is redirected to this page. Here student can view all items posted by other students for sale. All items has their price in points. Student can buy only if he has enough earned points in his account.

Student can filter all items as per their category as well as per his need by using the category drop down menu at the top of all products. He can select a particular category and view all items in that particular category.





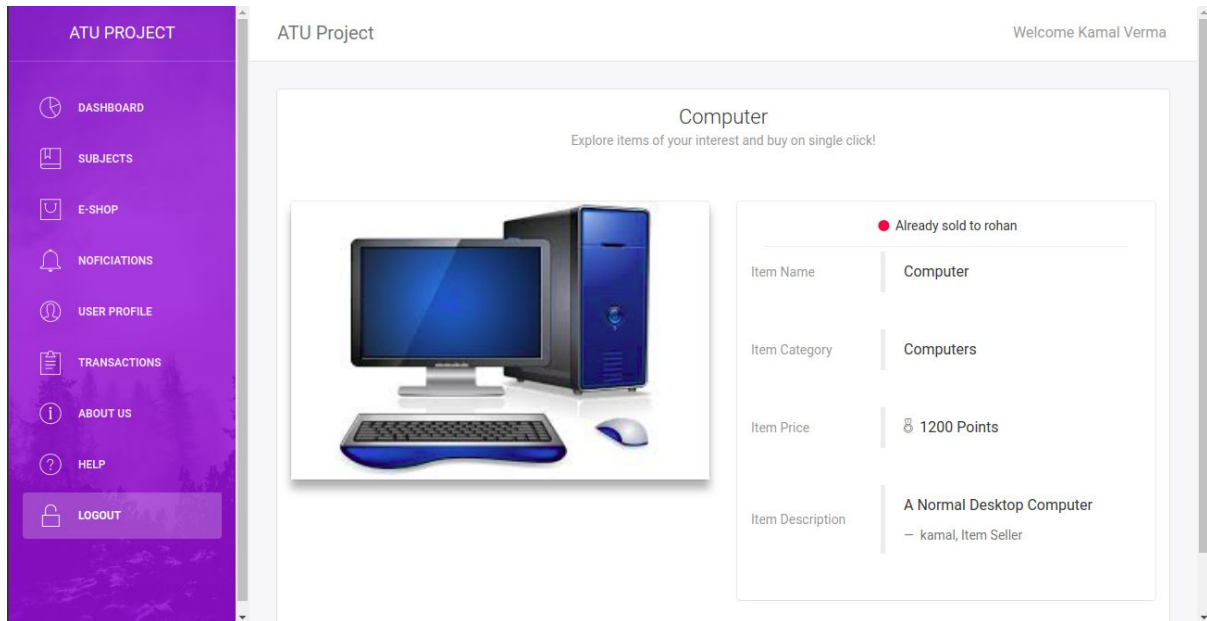
★ Item Page : -

When student clicks on a particular item, he is redirected to the item's main page on the web application. On this page, student can view all details of the item as Name of the item, Price of the item, Category of the item and Description of the item.

If the item is still for sale, student can view a green dot stating ITEM FOR SALE otherwise ITEM SOLD TO if it is already sold to someone else.

If the item is still for sale, student can view buy now button at the bottom. Student can click on this button and buy the item if and only if he has enough earned points in his account.

When a student buy an item, price points are deducted from buyer's account and credited to sellers account.



★ Sell Item Page :-

If a student wants to post his item for sale for some points, he can post his item on Sell Items page under E - Shop. He enters few basic details as name, description, category, price in points and a display picture for his item.

ATU PROJECT

DASHBOARD

SUBJECTS

E-SHOP

NOTIFICATIONS

USER PROFILE

TRANSACTIONS

ABOUT US

HELP

LOGOUT

Item Details

Let us know a brief about your item!

ITEM NAME

Enter Item Name

ITEM CATEGORY

ITEM DESCRIPTION

Enter Item Description

ITEM PRICE(IN POINTS)

Enter Price in points

UPLOAD PICTURE

BROWSE

Upload

★ Bought Items Page :-

Students can view his item bought history at bought item page under E - Shop.
Whenever student buys an item, the item is updated in his bought items section.

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ATU Project E-Shop Your Bought Items

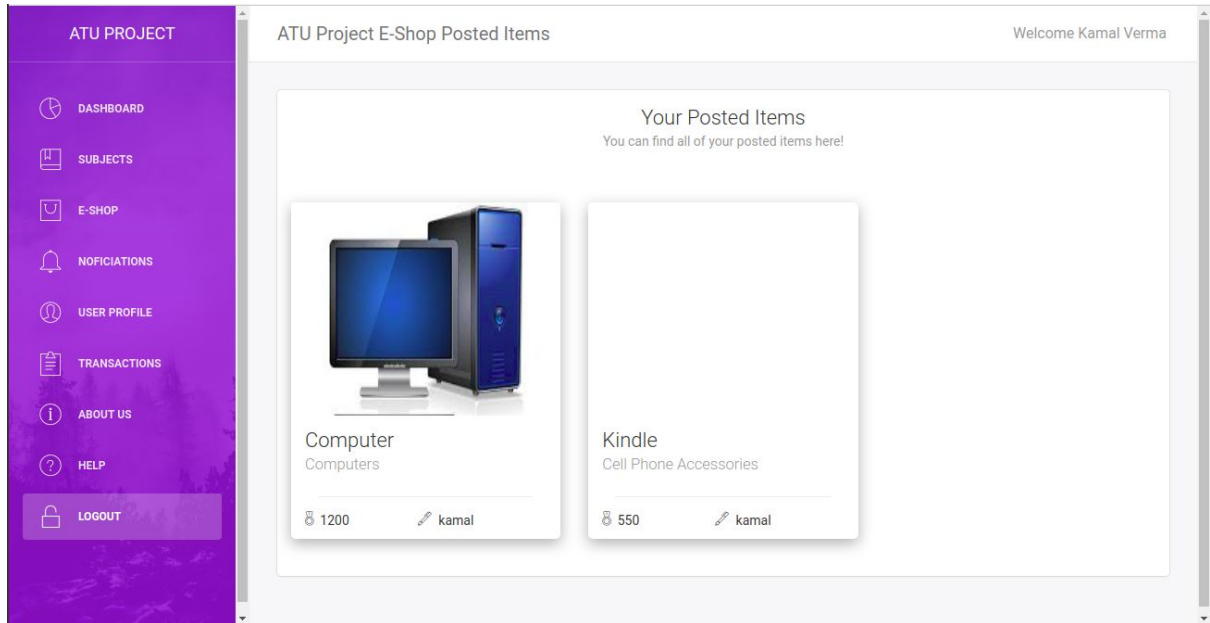
Welcome Kamal Verma

Your Bought Items

all your bought items are here!

★ Posted Item Page :-

Student can post an item by specifying its price and category at Sell Items page to earn some points. Whenever any other student buys the item, total price in points is deducted from buyer's account and credited to the seller's account. At this page student can all his posted items.



★ Profile Page :-

Student has access to his profile so that he can view and update his basic profile info such as name, address, about me etc.

The screenshot displays the 'Profile Page' of the 'ATU PROJECT' application. On the left is a purple sidebar with navigation links: DASHBOARD, SUBJECTS, E-SHOP, NOTIFICATIONS, USER PROFILE, TRANSACTIONS, ABOUT US, HELP, and LOGOUT. The main content area is titled 'Profile Page' and 'Welcome Kamal Verma'. It features an 'Edit Profile' form with the following fields: NAME (Kamal Verma), USERNAME (kamal), E-MAIL (2016ucp1381@mnit.ac.in), COLLEGE (College), COURSE (Course), ROLL NUMBER (Roll Number), CITY (City), COUNTRY (Country), and POSTAL CODE (ZIP Code). There is also an 'ABOUT ME' section with a placeholder text 'Here can be your description'.

★ Transactions Page :-

Student can view all transactions of his earned points to his account such as any professor added some points, deducted points, earned some points by selling an item or spent some points by buying an item with time and date details.

ATU PROJECT

DASHBOARD

SUBJECTS

E-SHOP

NOTIFICATIONS

USER PROFILE

TRANSACTIONS

ABOUT US

HELP

LOGOUT

Transactions

Welcome Kamal Verma

Transactions

Have a look at your transactions

DATE	TIME	DESCRIPTION	POINTS	CATEGORY
19-4-2019	17:5:23	Points Added	1	Professor
19-4-2019	17:4:12	Points Added	10	Professor
15-4-2019	17:47:2	Sold Item Kindle	550	E-Shop
13-4-2019	8:22:48	Sold Item Computer	1200	E-Shop
13-4-2019	8:10:52	Points Added	10	Professor

Updated Just Now

★ Notifications Page :-

Student can view all the transaction on the web application.

ATU PROJECT

DASHBOARD

SUBJECTS

STUDENTS

NOTIFICATIONS

USER PROFILE

TRANSACTIONS

ABOUT US

HELP

LOGOUT

Notifications

Welcome Pankaj Tanwar

Notifications

1 Marks added in Subject Programming to student Kamal Verma by Prof. Pankaj Tanwar

10 Marks added in Subject Programming to student Kamal Verma by Prof. Pankaj Tanwar

saiteja123 just bought an item Kindle for 550 points.

kamal posted an item kindle for 550 points just now.

500 Marks added in Subject It 3001 to student Saiteja Marella by Prof. Pankaj Tanwar

rohan just bought an item Computer for 1200 points.

1500 Marks added in Subject Programming to student Rohan Siwach by Prof. Pankaj Tanwar

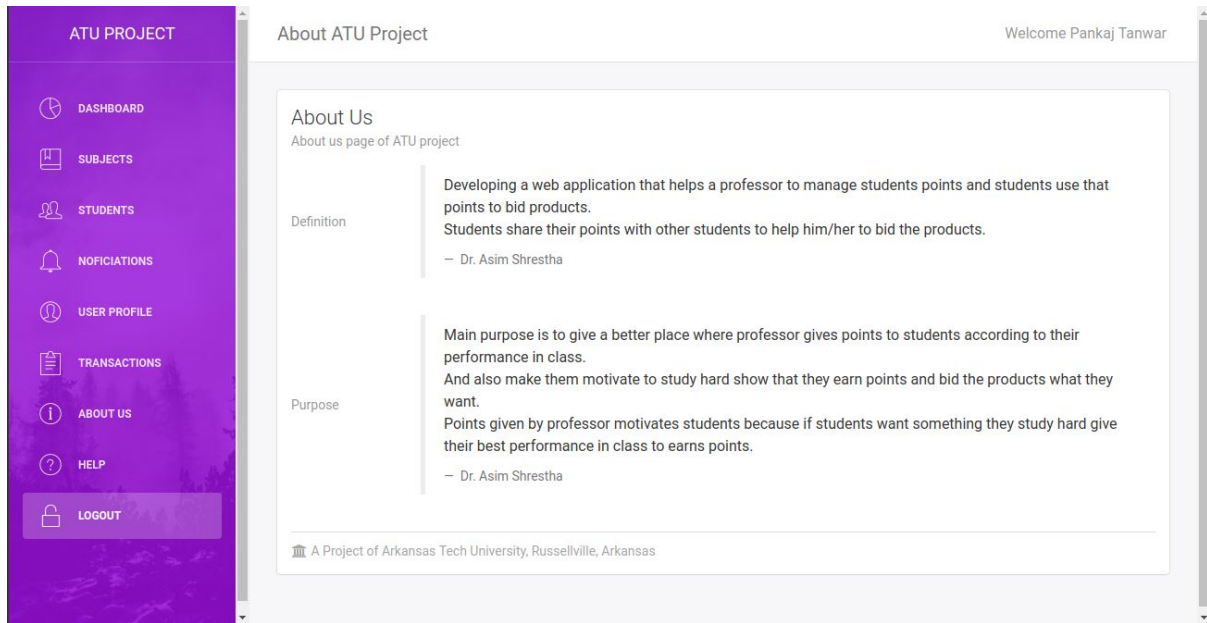
10 Marks added in Subject Programming to student Kamal Verma by Prof. Pankaj Tanwar

10 Marks added in Subject Programming to student Kamal Verma by Prof. Pankaj Tanwar

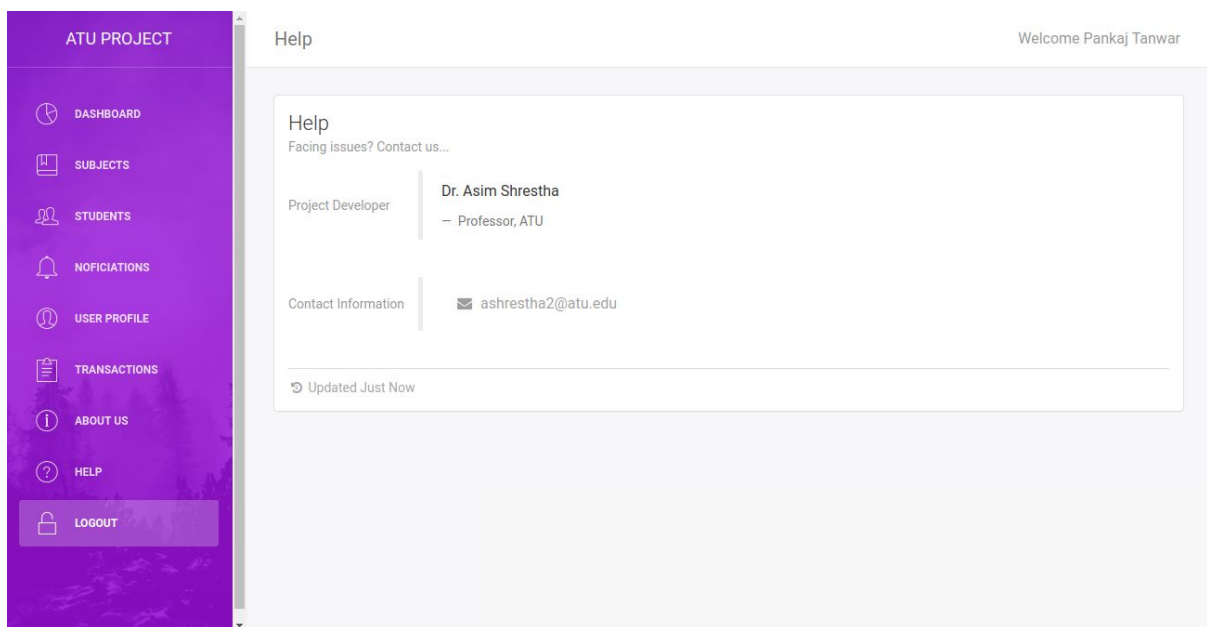
Other Pages

★ About Us Page :-

This page details about the web application as intro, motive etc.



★ Help Page :-



Future Scope

★ UI Enhancement : -

UI of the web application can be improved for better user experience. Web Application should be responsive as well. Improvement of interface gives user a better understanding of application.

★ Real Time Chat : -

Real time chat facility can be added for buyer and seller to get better understanding of item. If a user wants to buy an item and he has any query regarding the item, he can directly message to the seller.

★ SMS Facility : -

SMS facility can be added to inform student of notifications in case of student is not able to open the web application.

★ Mobile App : -

An Android app should be there for this application as more than 60% android user prefer a mobile app instead of a web application.

★ Online Payment Gateway : -

Online payment gateway can be added to the web application for better and secure user experience.