

**ISTANBUL AYDIN UNIVERSITY ★ FACULTY OF ENGINEERING**

**INTERACTIVE ACADEMIC PERSONEL  
WEBPAGE DESIGN**

**GRADUATION PROJECT**

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**İSTANBUL AYDIN ÜNİVERSİTESİ ★ MÜHENDİSLİK FAKÜLTESİ**

**İTERAKTİF AKADEMİK PERSONEL WEB UYGULAMASI**

**BİTİRME PROJESİ**

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# **1.INTRODUCTION**

## **1.1 PURPOSE OF THESIS**

In today's conditions we are living in a digital age where the majority can take advantage of computer aided resources.As it returns undergraduates able to use automated systems to improve their academic capabilities.However the existing programs can not provide sustained communication between lecturers and undergraduates who should work together for a healthy educational process.Unfortunately we are not able to solve this problem yet.In this context the education system needs an utility which can establish communication between these two academic associates.Although all the universities have similar automated programs they are not sufficient in terms of providing interaction.Whereupon we need to construct a new user friendly program futhermore undergraduates should have accessibility.

The aim of this project is to find a solution that can respond this communication gap between undergraduates and lecturers.As an advantage of this project undergraduates can communicate with their lecturers easily and lecturers contribute to undergraduates' educational process with their sharings for instance documents that are necessary for to perceive courses evidently.The most benefical privacy of this project is mobility.Users can reach the program in every digital platform.

## **1.2 HYPOTHESIS**

This project which is an ASP.Net application , designed in association with bootstrap technology.The undergraduate side provide abilities such as sending e-mail to lecturers,the ones that the undergraduate enroll their cources,wathing educational video conferences,displaying latest announcements and reaching files which are shared by the lecturers.The lecturers side provide abilities such as sending e-mails to undergraduates,the ones that are enrolled his/her course,sharing specific lecture's or educational video conferences ,sending SMS,sharing announcements and files.

## 2. PROJECT DEVELOPMENT TECHNOLOGIES

### 2.1 Purpose

As with all projects, this project also has main constituents. Software technologies will be used in the development stage ;

1. ASP.NET
2. Bootstrap
3. Eclipse
4. Intel XDK

ASP.NET used as project development platform. The reason for this to ensure fast and stable operation of the software. This platform is also supports the other elements that are used for project design. Whereas Bootstrap loading of the project design work. In accordance with standards of software, leading the way to meet at the common point of all system designs. Eclipse and Native Android used for application development, for the other platforms Intel XDK is used which is a hybrid application development platform. The main purpose of all this technology, stable software operation, to be user-friendly and easy intervene and if necessary re-revision of the developer is to facilitate.

### 2.2 ASP.NET

In the project process Visual Studio 2012 used as development platform. The project's overall system of data retrieved from the database using ASP.NET method has been writing on the side .aspx pages to be written and SMS, E-mail, File Upload, Download File, Share Announcements likewise the method has been working over the project properties. Method to launch the databases whether the method of the DataTable within the parameter list of functions will be transferred to. This methods will be examined in the third chapter. Figure 2.2.1 shows the structure of the project.

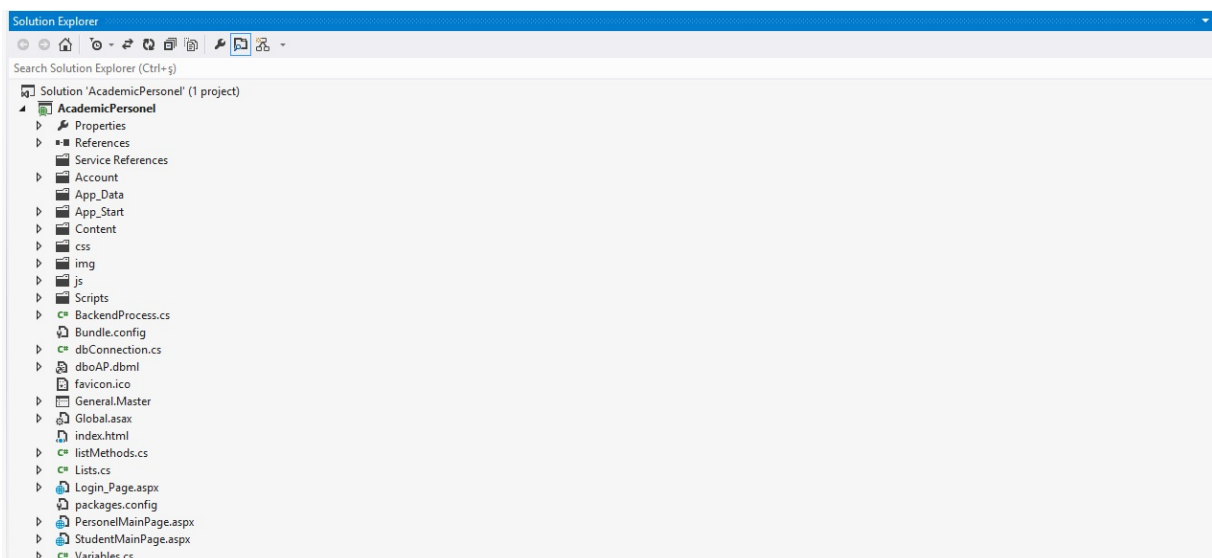
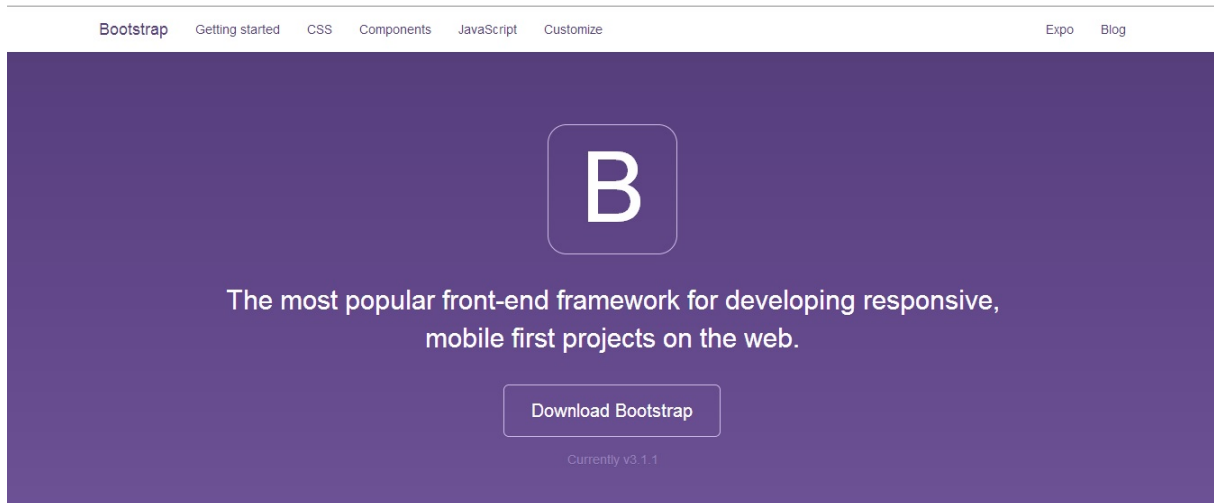


Figure 2.2.1

## 2.3 Bootstrap

Bootstrap is the CSS and Javascript framework technology used for the process of project development which is user friendly and usable. To use Bootstrap first it is necessary to download the framework from <http://getbootstrap.com/>.



**Figure 2.3.1**

Bootstrap sources can be used as internal CSS or external CSS. The most beneficial advantage of Bootstrap is synchronization in software design. These factors provide the standards ;

- To strengthen the quality of software
- An easy to understand design approach
- To be userfriendly
- To be fast and high availability
- The design can easy be interfering

When using Bootstrap addition of the following codes to index.aspx prepare the framework of Bootstrap.

```
<!-- Latest compiled and minified CSS -->
<link rel="stylesheet" href="//netdna.bootstrapcdn.com/bootstrap/3.1.1/css/bootstrap.min.css">

<!-- Optional theme -->
<link rel="stylesheet" href="//netdna.bootstrapcdn.com/bootstrap/3.1.1/css/bootstrap-theme.min.css">

<!-- Latest compiled and minified JavaScript -->
<script src="//netdna.bootstrapcdn.com/bootstrap/3.1.1/js/bootstrap.min.js"></script>
```

**Figure 2.3.2**

## **2.4 MOBILE SYSTEM**

One of the benefits of Bootstrap is the design framework is multifunctional. When project viewed in any mobile device through the Bootstrap it will be functioning and have a beautiful view. This website can process in any mobile device responsively and dynamic. The mobile application of this system developed on Android OS. The Android application is developed in Eclipse platform based on web application. By reason of on the basis of project HTML5, CSS3 and JQuery, with Intel XDK ; IOS, Blackberry, Windows Phone operating system integration can be achieved.

### 3.WEB APPLICATION

#### 3.1 PURPOSE

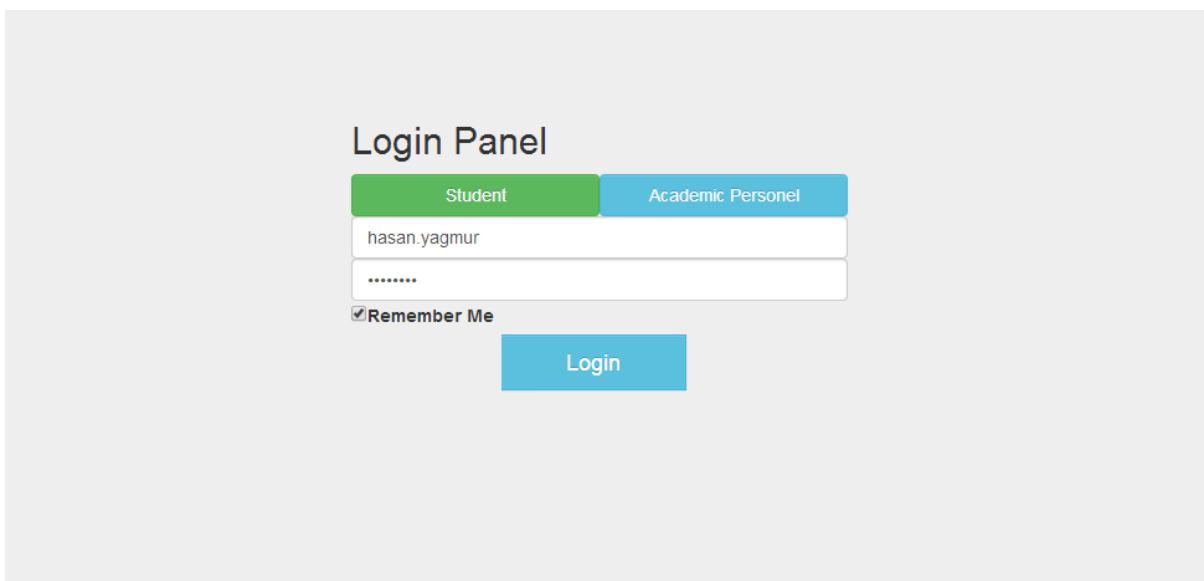
In this project,ASP.NET web application is supported with bootstrap's design framework.That point is important for software quality,software revisions and design standarts.The Interactive Academic Personal Web Application is also source of inspiration for Android Mobile Application.

#### 3.2 WEB APPLICATION'S CHARACTERISTICS AND INTERFACES

In this project,Academic Personnels and Undergraduates common use as flat rate.Primary objectives for Academic Personnels are sending sms and email to all classes those are lecturers have,make-up announces and make-up downloadable documents for students.Student page is similar to Academic Personnel Page.Students' page specialities are sending e-mail to lecturers,displaying announces and documents.

Initially, two types of users can login to the software.The first type of user is Undergraduates.

Login Panel :



**Figure 3.2.1**

Within the login panel,there are validation processes:

- If user select Student Login Tab,user is directed to Student Page if Username and Password are valid.
- If user select Academic Personal Login Tab,user is directed to Student Page if Username and Password are valid.



User (Student) login with the personel username and password correctly. User is directed to Student Main Page.

Student Home Page:

ISTANBUL AYDIN  
UNIVERSITESI

Welcome hasan.yagmur

Home E-Mail Online Education Announces Downloads

Last Announces

- Notlar 4 gün sonra açıklanacak!
- Project Management ödev teslimi için son gün!
- Yerinde Uygulama Merkezine başvuru yapmanız için 21.05.2014 tarihine kadar başvuru yapmanız gerekmektedir!

Last Document Names	Last Document Links
Homework	<a href="#">Download</a>
Lecture Note	<a href="#">Download</a>
Quiz Example	<a href="#">Download</a>

**Figure 3.2.2**

In the Student Home Page, there are five tabs and these tabs' functionalities are;

- 1. Home:** Last Five Announces and Downloadable Documents are displayed.
- 2. E-Mail :** Student sends e-mail to lecturers of the courses that student take the course.
- 3. Online Education:** Students display videos out of Ustream Channels depending of lecturers.
- 4. Announces:** Students display announces.
- 5. Downloads:** Student display documents and may download these documents.

## Student E-Mail Tab :

ISTANBUL AYDIN  
UNIVERSITESI

Welcome hasan.yagmur

Home E-Mail Online Education Announces Downloads

Send E-Mail

Your E-Mail Address: hasan.yagmur@gmail.com

Your E-Mail Password: .....

E-Mail Subject: Hello!

E-Mail Text: Hello Sir Mehmet!

Select Class Instructor: Mehmet Gundogan

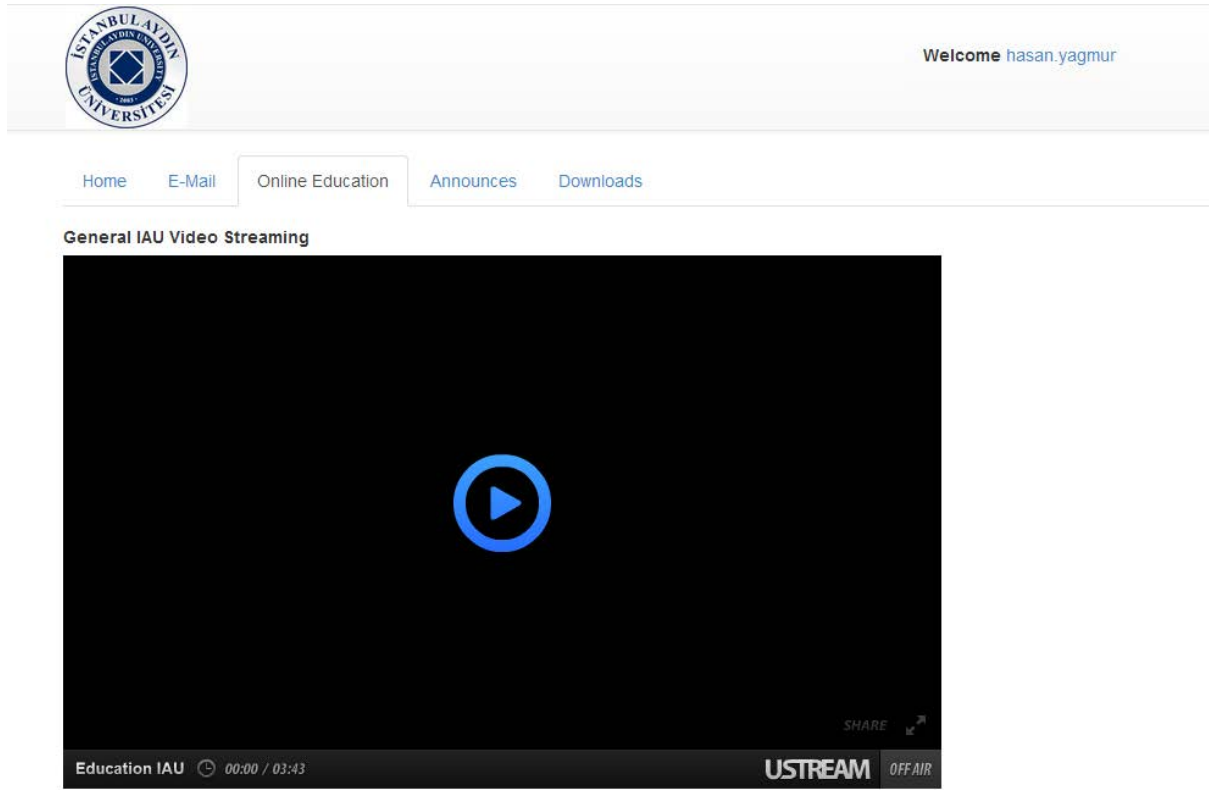
SEND

**Figure 3.2.3**

In the e-mail section, student sends e-mail to lecturer. E-Mail Sending process work with;

- Student must enter the mail address and password credentials correctly
- E-Mail Subject can not be null.
- E-Mail Text can not be null.
- All class instructors taken by students are listed in dropdown list. Student must select the target instructor and click “SEND” button to send.

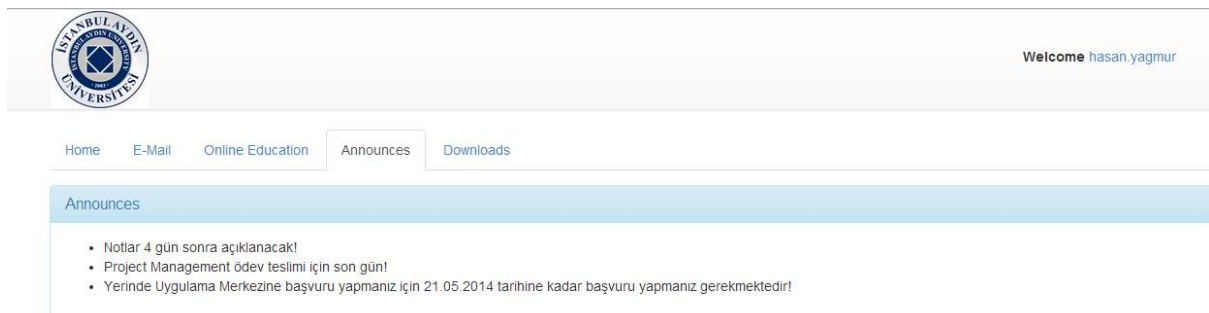
## Online Education Tab:



**Figure 3.2.4**

Each lecturer has an “Education Channel”.In this channel,lecturers give lectures their own courses on the UStream.Students watch these lectures online or as recorded videos.

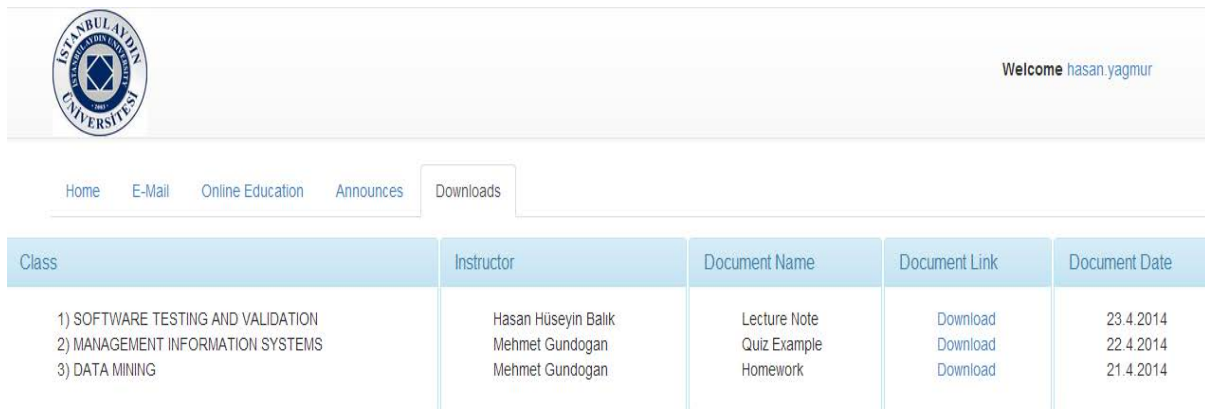
## Student Announce Tab:



**Figure 3.2.5**

In this section, students can display their course announces depending on their own courses. Unlike in the Student Home Page, all announces are listed in this page.

### Student Download Tab:



Class	Instructor	Document Name	Document Link	Document Date
1) SOFTWARE TESTING AND VALIDATION	Hasan Hüseyin Balk	Lecture Note	<a href="#">Download</a>	23.4.2014
2) MANAGEMENT INFORMATION SYSTEMS	Mehmet Gundogan	Quiz Example	<a href="#">Download</a>	22.4.2014
3) DATA MINING	Mehmet Gundogan	Homework	<a href="#">Download</a>	21.4.2014

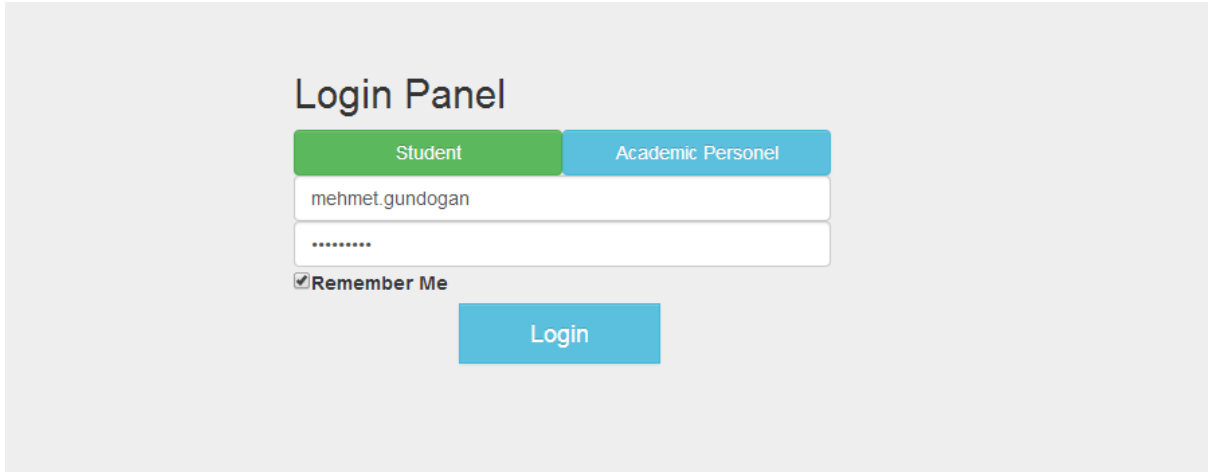
**Figure 3.2.6**

In this section Students can download the documents. The attributes of the tables are;

- Class : Courses of taken by students.
- Instructor : Lecturer of who teach the course.
- Document Name : Name of the Document defined by Instructor.
- Document Link : Downloadable Link
- Document Date : Document Dates are ordered by descending.

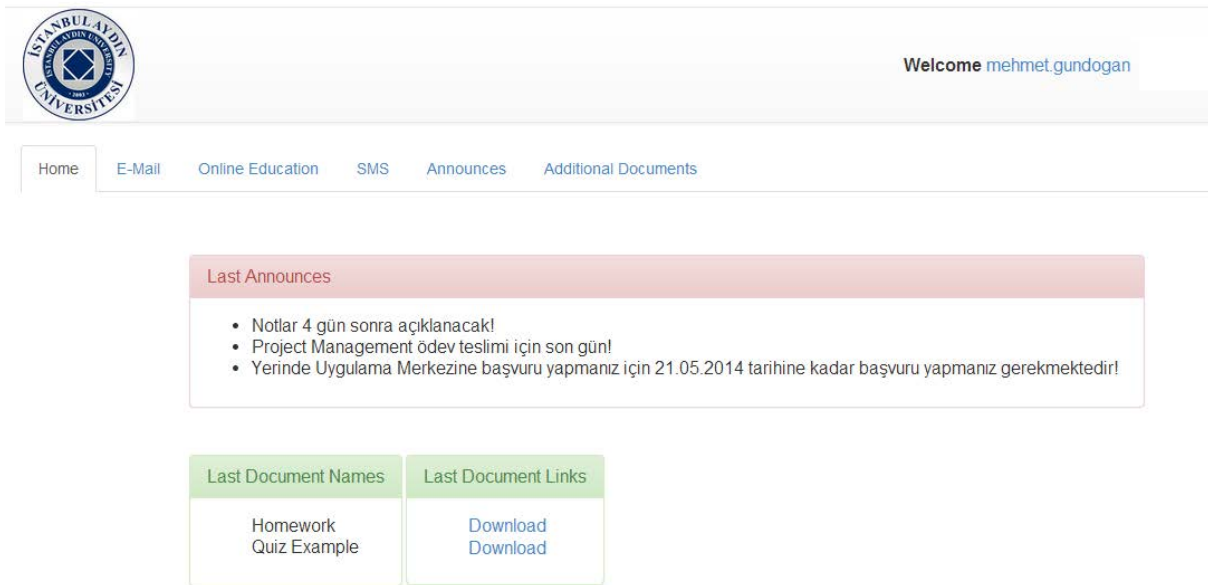
Documents are in a private server. Only system users can achieve the documents

Second type of user is Academic Personnel. Academic personnels have only admin panel unlike Undergraduates. Academic Personnel also login as student.



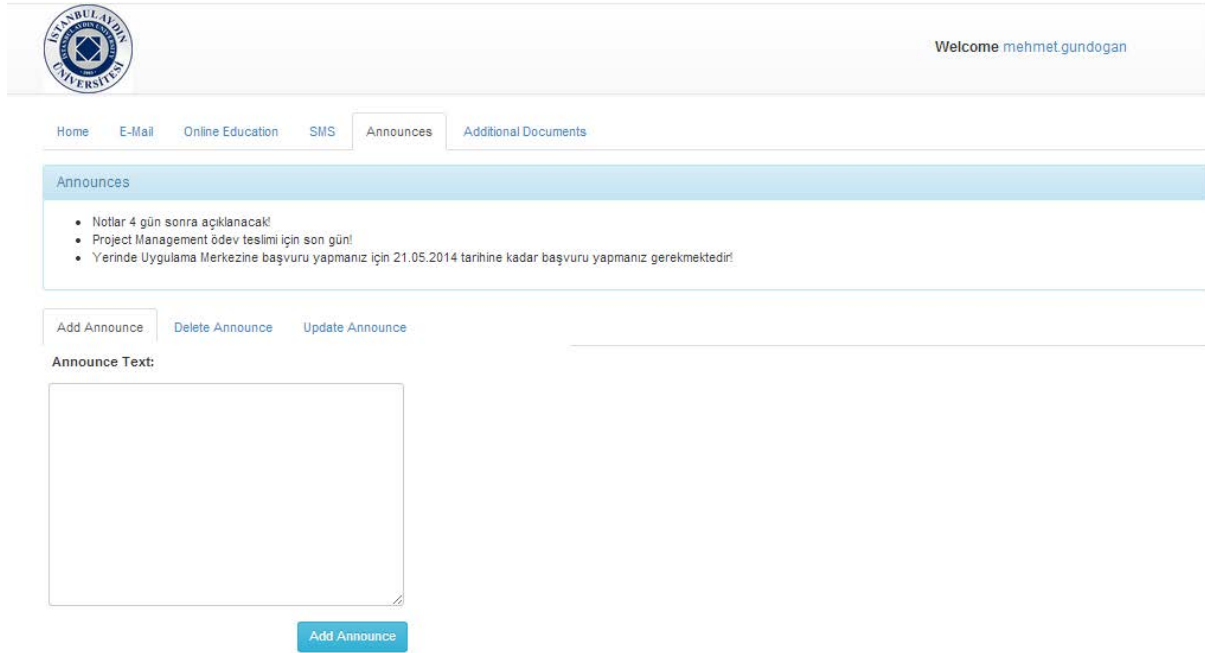
**Figure 3.2.7**

In here we see login panel . In this page firstly , our users choose their title (Student or Academic Personnel) then they enter their login information such as username and password .After that these informations directly goes to database and it checks if we have such a user or not. If it is exist we can successfully login . We also have 'Remember Me' choice in this page.



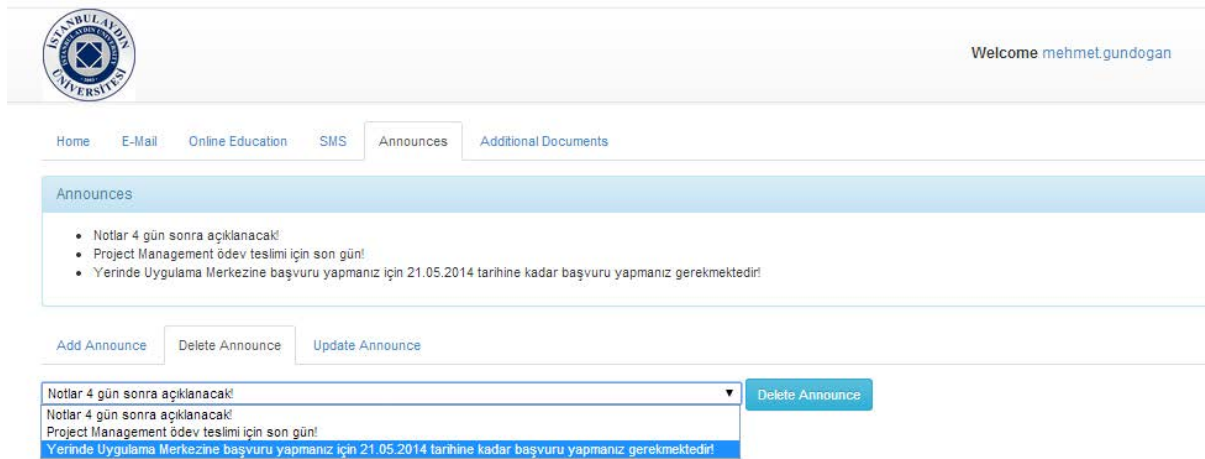
**Figure 3.2.8**

This is our program's home page. In this page our users can see last announces , latest document names and latest documents download links . Our users can download these documents thanks to links which we see in latest document links template. All of informations like last announces , last document names and last document links are acquired dynamically from database.



**Figure 3.2.8**

This page for our Academic Personnel Users . They can add announce to the system from this page . For doing this , it's enough to fill the blank textbox and click the blue '**Add Announcement**' button . These announces automatically saved to the database . Also we can see our latest announces in this page .



**Figure 3.2.9**

This page is also for Academic Personnel Users . They can delete their announces from the system in this page . When we choose the announce which we want to delete and click the blue '**Delete Announcement**' button . This record will directly deleted from our database which means so our system . Also we can see our latest announces in this page .



Welcome mehmet.gundogan

[Home](#) [E-Mail](#) [Online Education](#) [SMS](#) [Announces](#) [Additional Documents](#)

#### Announces

- Notlar 4 gün sonra açıklanacak!
- Project Management ödev teslimi için son gün!
- Yerde Uygulama Merkezine başvuru yapmanız için 21.05.2014 tarihine kadar başvuru yapmanız gerekmektedir!

[Add Announce](#) [Delete Announce](#) [Update Announce](#)

Notlar 4 gün sonra açıklanacak!  
Notlar 4 gün sonra açıklanacak!  
Project Management ödev teslimi için son gün!  
Yerde Uygulama Merkezine başvuru yapmanız için 21.05.2014 tarihine kadar başvuru yapmanız gerekmektedir!

[Update Announce](#)

**Figure 3.2.10**

Another page for Academic Personnel Users . In this page user can update their announces. First user choose the announce which he want to update ,then user write the new one and click the blue '**Update Announce**' button . This record will directly updated in database which means so in our system . Also we can see our latest announces in this page .

ISTANBUL AYDIN  
UNIVERSITESI

Welcome mehmet.gundogan

Home E-Mail Online Education SMS Announces Additional Documents

Send E-Mail

Your E-Mail Address

Your E-Mail Password

E-Mail Subject:

E-Mail Text:

Dosya seçilmedi

Select Classes

**Figure 3.2.11**

This is the page which our project's e-mail functions work . In this page users and academic personnel's can send e-mail to each other . This e-mails also recorded in our database .

ISTANBUL AYDIN  
UNIVERSITESI

Welcome mehmet.gundogan

Home E-Mail Online Education SMS Announces Additional Documents

SMS Text

Select Classes

**Figure 3.2.12**

This is the page which our project's SMS functions work . In this page academic personnels can send e-mail to their students . . For doing this , it's enough to fill the blank textbox and click the blue '**Send Sms**' button . Also user can choose the class which he wants to send SMS to it's students.



Home E-Mail Online Education SMS Announces Additional Documents

Class	Instructor	Document Name	Document Date
1) DATA MINING 2) MANAGEMENT INFORMATION SYSTEMS	Mehmet Gundogan Mehmet Gundogan	Homework Quiz Example	21.4.2014 22.4.2014

Doc. Name

Doc. Link  Dosya Seç Dosya seçilmedi

**Figure 3.2.12**

This page for our Academic Personnel Users . In this page they can add documents to the system for students. In here we can give name to our document and we can upload it to system . Also we can choose the class which we want to send this document's link to it's students.

## 4.ANDROID MOBILE APPLICATION

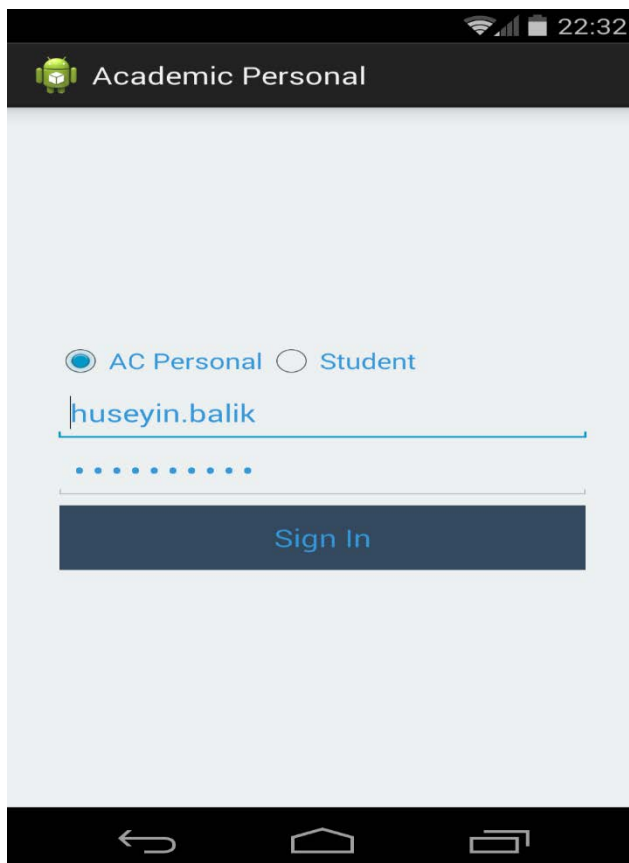
### 4.1. PURPOSE

The Academic Personnel Interactive Web Application's main advantage is mobility. Application is already responsive for mobile browsers. As well as users need to an application for smart phones. This application improve the usability and mobility of project.

Functionality and screenshots are shown at 4.2.

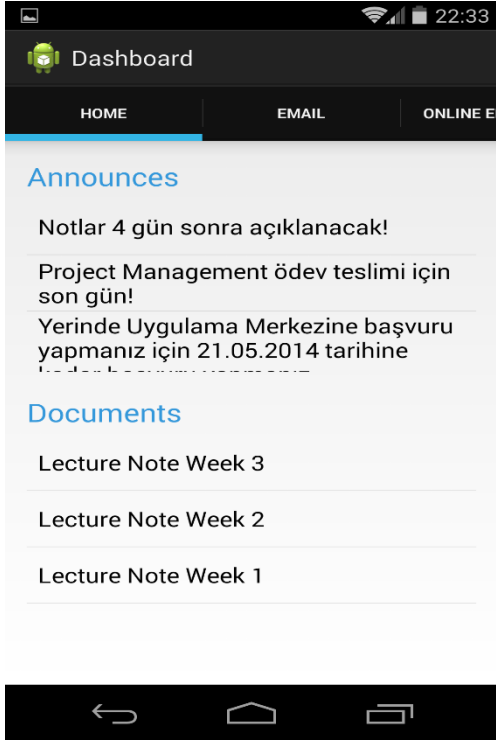
### 4.2.MOBIL APPLICATION

Mobile Application Login :

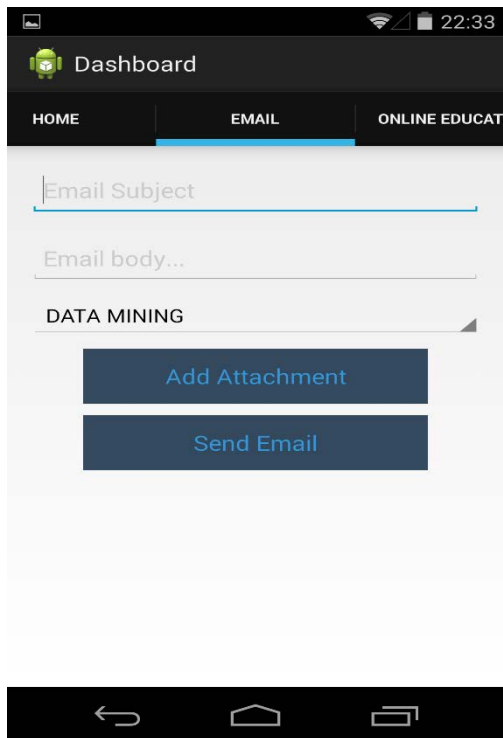


In this application page, users can login as AC Personal or Student. The system logic is the same with the web application. If the username and password are correct, the user is directed to the User Dashboard.

## Mobil Application Dashboard :

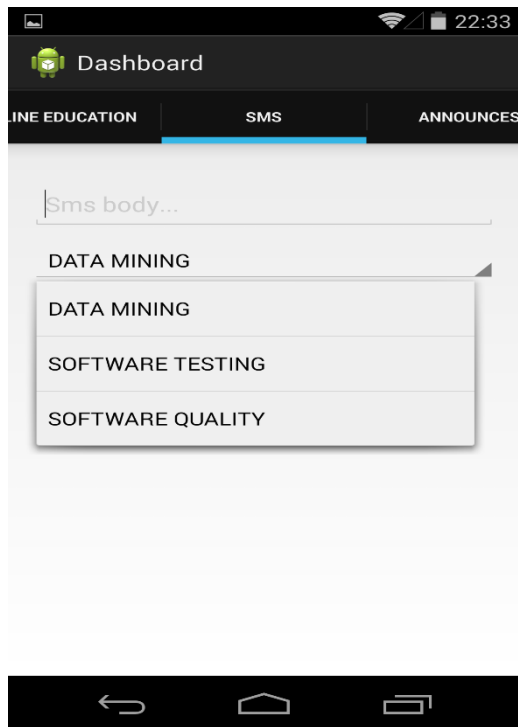


In the mobil application dashboard home tab,announces and downloadable documents are displayed.These lists are depending on academic personnels' courses.



The second dashboard tab is e-mail. With in e-mail tab, lecturers send e-mail to the classes. Process is:

- User enters E-Mail Subject
- User enters E-Mail Body
- User select a class from dropdown list.
- User click Send Email button



SMS Send Method is the same functionality with e-mail.

- User enters SMS body text.
- User select a class from dropdownlist
- User click Send SMS button

## **5.CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 PRACTICAL APPLICATION OF THIS STUDY**

In conclusion this project will provide a better communication between undergraduates and lecturers. Also give opportunity to lecturers share their experiences and knowledge with undergraduates which can make education more interacted. Undergraduates can benefit from the system by receiving sharings from their lecturers properly.

## **REFERENCES**

**Ref 1 :** <http://www.visualstudio.com/>

**Ref 2 :** <http://getbootstrap.com/>

**Ref 3 :** <http://developer.android.com/index.html>

**Ref 4 :** <http://www.eclipse.org/cdt/>

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