



AMERICAN INTERNATIONAL UNIVERSITY–BANGLADESH (AIUB)
FACULTY OF SCIENCE & INFORMATION TECHNOLOGY

INTERNSHIP AFFILIATIONREPORT ON

Front-end Developer at AIUB CS Development Team

An Internship Report Presented to the
OFFICE OF PLACEMENT and
DEPARTMENT OF COMPUTER SCIENCE
In Partial Fulfillment of the Requirements for the Degree
BSc. In CSE

Supervised By

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Date of Submission: April 27, 2019

LETTER OF SUBMITTAL

April 27, 2019

Md. Masuduzzaman

Lecturer

Department of Computer Science

American International University-Bangladesh (AIUB)

Subject: **Submission of Internship Report.**

Honorable Sir,

With profound veneration and humble submission, I would like to submit my internship report entitled “Front-end Developer at AIUB CS Development Team”. This report is prepared as per requirement of the Internship course to complete my Bachelor of Science degree in Computer Science and Engineering program. I hereby acknowledge that I was held under the supervision of DR. Md. Mahbub Chowdhury Mishu, Project Manager, AIUB CS Development Team and Assistant Professor, Department of Computer Science, AIUB throughout my internship program. In this report, I tried to summarize my experience of working at AIUB CS Development Team as a front-end developer. I was assigned to work as an intern developer but I had the opportunity to take parts actively in the project by designing the user interface of AIUB FST website and web-portal. I have tried my level best and put my sincere effort to make this report informative moreover precise in a presentable shape. It would be an immense pleasure if the report can serve its purpose. I sincerely hope you would graciously be pleased to accept my report and oblige thereby.

Sincerely yours,

Rahat Rahman

Id: 16-3975-1

Bachelor of Science in Computer Science and Engineering

Faculty of Science and Technology

Letter of Endorsement

The Internship Affiliation Report entitled “Front-end Developer at AIUB CS Development Team”, has been submitted to the Office of Placement and Department of Computer Science in partial fulfillment of the requirements for the degree of Bachelor of Science (B.Sc) in Computer Science and Engineering by Rahat Rahman & 16-30975-1. This report is presented to the Internship Defense Committee for evaluation and has been accepted.

(Any opinions, suggestions made in this report are entirely that of the author of the report. The University does not condone nor reject any of these opinions or suggestions.)

<hr/>	<hr/>
Md. Masuduzzaman	Dr. Md. Mahbub Chowdhury Mishu
<i>Internship Supervisor</i> (academic)	<i>Internship Supervisor</i> (industry)
Lecturer	Assistant Professor
Department of Computer Science	Department of Computer Science
American International University-	American International University-
Bangladesh	Bangladesh

Dr. Dip Nandi
Associate Professor, Director
Faculty of Science & Information Technology
American International University Bangladesh
(AIUB)

Acknowledgement

First of all I would like to thank almighty Allah, for his grace in accomplishing my internship report timely.

I would like to express my gratitude to the **Faculty of Science and Technology** to keep internship credit in the curriculum of the graduation program and give me a scope of tasting the flavor of industry oriented tasks and the field of work with my interest. I am also grateful to the **Faculty of Science & Technology and Office of Placement & Alumni**, AIUB to arrange an opportunity for choosing an own interested organization and complete internship there.

I am also thankful to my organization supervisor **Dr. Md. Mahbub Chowdhuri Mishu**, Project Manager, AIUB FST Website Development Project, *AIUB CS Development Team* from the core of my heart for his kind support, guidance, constructive, supervision, instructions and advice and for motivating me to do my internship smoothly at *AIUB CS Development Team*.

I feel proud and gratified that I was always held the under supervision of the AIUB CS Development team and got advices and guidance directly from **Umme Marzia Haque**, Backend Developer, *AIUB CS Development Team* and **Tanvir Ahmed**, Backend Developer, *AIUB CS Development Team*. I got immense support from them while developing the FST website architecture, design and also in technical issues. Here, with daily reporting along with mental and professional support enhances my experience in the internship life.

Moreover, to prepare this report and other documentation regarding Internship Report and else I would show appreciation to all the members of *AIUB CS Development Team*, who always advised me and helped me through hands and pens.

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1. INTRODUCTION

Internship is a professional learning experience that offers meaningful, practical work related to a student's field of study or career interest. An internship gives a student the opportunity for career exploration and development, and to learn new skills. It offers the employer the opportunity to bring new ideas and energy into the workplace, develop talent and potentially build a pipeline for future full-time employees. It is an official program offered to the undergraduate and graduate students to work in any institution concerning student's field of study and career target. It is an opportunity where I can judge my ability, skill and working knowledge. It also educate a student about the working ethics of a company, institution moreover of the industry. I started my internship at AIUB CS Development Team under the Faculty of Science and Technology of American International University-Bangladesh on February 7, 2019 as a frontend developer. At first I was nervous but also excited about the work I was intended and instructed to do. After completing almost three months working in the AIUB CS developing team I must admit that it was really a wonderful experience. I have learned and implemented a lot of things in the last three months and the knowledge I gathered here will have a great impact in my personal and professional life. This was a great opportunity for me to get practical knowledge about my field of study.

1.1. Rational

The report has several importance. It makes an opportunity for me to briefly discuss the pros and cons of my internship program. This report reflects the various aspects of the internship program. In this report I will narrate about the organization I have worked on and the also about the kind of works I did there. The report has all the information needed for the completion of the 3 credit of the internship course. To complete this internship I had to go through various activities. This reports holds the summary of the knowledge I got from this 3 credit internship program. This report will gleam the efforts, understanding, learning, working responsibilities and activities of mine during the internship period. I am interested to undertake the internship report as it gives a clear understanding of my internship job. So it is very important for my organizational career.

1.2. Background

American International University - Bangladesh (AIUB) is a government approved private university founded in 1994 by Dr. Anwarul Abedin. **AIUB currently operates under four distinct Faculties:**

- Faculty of Arts and Social Sciences (**FASS**)
- Faculty of Business Administration (**FBA**)
- Faculty of Engineering (**FE**)
- Faculty of Science and Technology (**FST**)

The AIUB CS Development Team works under Faculty of Science and Technology and currently developing two projects for FST. One of the projects named AIUB FST Website Development Project and it is the core project of the AIUB CS Development Team. In this project a dynamic, effective website that contains all the important and necessary information about Faculty of Science and Technology is developing by a dedicated team. The main focus of AIUB CS Development Team is to make an automated, technologically advanced web based portal for FST.

1.2.1 Vision

American International University-Bangladesh (AIUB) envisions promoting professionals and excellent leadership catering to the technological progress and development needs of the country. AIUB CS Development team also follows the vision of AIUB and always dedicated to provide technologically advanced and updated web solutions that is necessary to keep AIUB and FST in the leading position.

1.2.2 Mission

American International University-Bangladesh (AIUB) is committed to provide quality and excellent computer-based academic programs to the Computer Science students responsive to the emerging challenges of the time. That's why it is very important to have an online portal for FST students so that they can get necessary news, notices and information about course curriculum and teachers. AIUB is dedicated to nurture and produce competent world class professional imbued with strong sense of ethical values ready to face the competitive world of science and technology. So the Department of

Computer Science always wants to acquaint recent and updated information, technology to their students and AIUB CS Development is a recent addition to accomplish their target. The FST Portal is being developed using the most recent and modern technology, component and architecture.

1.2.3 Quality Policy

The main target of AIUB CS Develop Team is to develop an auspicious, fully functional, dynamic, efficient and effective web portal which includes faculty and admin profile, administrative works, faculty research, publication, course related information etc. Quality of FST website is maintained by the FST website development project team. It is a fully secured, responsive, user friendly web based portal developed considering the international quality. Recent and updated architecture and programming language is used to develop this site. Latest version of designing component is used to design the UI of this website. So maintaining the international quality of web development was the first priority while developing the FST website.

About the quality policy of the organization, the statement below was mention in the website of AIUB: “Quality shall be adhered to in conformity with the prescribed national and international standards of quality and excellence including those provided by the professional bodies and organizations. The American International University- Bangladesh is committed to translate into actions the programs, projects and activities related to the sustainable delivery of quality management operation system. The students being the valued customers are the central focus of the university shall be provided with utmost care and attention to meet their primordial needs and future career success. In view of this commitment, the university shall exert best efforts to harmonize its action through collaboration, cooperation and consultation with every unit and components of the university.”

1.2.4 Goals

The primary goal of AIUB CS Development Team is to develop quality full, user friendly, technically advanced website for Faculty of Science and Technology of AIUB. No compromise with the efficiency and quality of the website is the main concern of the development team. The FST website aims to provide all the necessary information about the educators of Faculty of Science and Technology to the students. Moreover, the administrative work regarding Department of Computer Science and other faculties can also be done by this web portal.

As an organization AIUB has some obligatory goal. Such as:

- Sustain development and progress of the university.
- Continue to upgrade educational services and facilities responsive of the demands for change and needs of the society.
- Inculcate professional culture among management, faculty and personnel in the attainment of the institution's vision, mission and goals.
- Enhance research consciousness in discovering new dimensions for curriculum development and enrichment.
- Implement meaningful and relevant community outreach programs reflective of the available resources and expertise of the university.
- Establish strong networking of programs, sharing of resources and expertise with local and international educational institutions and organizations.
- Accelerate the participation of alumni, students and professionals in the implementation of educational programs and development of projects designed to expand and improve global academic standards.

1.2.5 Linkages and Networking

- Microsoft Security Cooperation Program (SCP)
- Microsoft IT Academy (www.cec.aiub.edu)
- MSDNAA (www.cec.aiub.edu)
- CCNA and IT Essentials in collaboration with CISCO (www.cec.aiub.edu)
- Authorized Sun Education Centre (www.cec.aiub.edu)
- Education Partner of Bangladesh Cricket Board (www.cec.aiub.edu)
- Oracle Academy (www.cec.aiub.edu)
- Certifies Internet Web (CIW) Professional Program (www.cec.aiub.edu)
- CTP Authorized Training Academy (www.cec.aiub.edu)
- The Duke of Edinburgh's International Award (www.intaward.org)

1.2.6 Members of AIUB CS Development Team

A devoted team is working to provide FST automated solutions. A web based portal of FST is being developed by the AIUB CS Development Team under the AIUB FST Website Development Project. Another project entitled “Research portal” is about to start by the development team as soon as possible. The following members are working heart and soul so that all the information of FST can be accessed and operated easily using automated, dynamic and secured web based portal.

- Dr. M. M. Mahbubul Syeed, Team Lead (AIUB FST Website Development Team) and Associate Professor, Head-in-charge (Undergraduate Program), FST, AIUB.
- Dr. Md. Mahbub Chowdhury Mishu, Project Manager (AIUB FST Website Development Team) and Assistant Professor, FST, AIUB.
- Umme Marzia Haque, Backend Developer (AIUB FST Website Development Team) and Assistant Professor, FST, AIUB.
- Tanvir Ahmed, Backend Developer (AIUB FST Website Development Team) and Lecturer, FST, AIUB.
- Naymul Islam, Backend Developer-Database (AIUB FST Website Development Team).
- Sabbir Hossain, Backend Developer-Database (AIUB FST Website Development Team).

And myself Rahat Rahman, worked as a frontend developer of AIUB FST Website Development Team.

1.2.7 Services

The services provided by the AIUB CS Development Team includes developing a dynamic, functional, automated website for FST and an effective, technologically advanced portal for Research and Publication of AIUB.

As an organization AIUB also provides a bunch of other services to the students and other stakeholders. The services provided by AIUB are discussed below:

- Academic Counseling: Each faculty member is required to provide additional academic assistance and guidance outside the class hours.
- Office of Placement & Alumni: Separate placement office to assist students to find challenging and growth oriented employment and internship.
- Office of Student Affairs: Coordinates controls and initiates external and internal student activities.

- Office of Probation: Provides special academic counseling to students with academic need or deficiency.
- Office of Planning and Development: Involved with long term university development and strategic planning.
- Office of Research and Publications: Coordinates academic research and publication of AIUB Journal of Business and Economics and AIUB Journal of Science and Engineering.
- International Affiliation: Affiliation with several universities and organizations world-wide.
- Securities: Security facilities include 24 hours in-house security personnel. Monitoring is accomplished through CC TV.
- Authorized Pearson VUE testing center for GMAT, UKCAT and LNET. IT Vendor Certification for CISCO, SUN, Microsoft etc.
- Authorized testing center for TOEFL, IBT.

Only a university can fully blossom the students potential. With the guidance of the Management and the committed faculty and staff, AIUB continues in its effort to enhance its student's intellect, and inflict upon their minds without fear and these are needed to become true leaders - the ultimate goal of AIUB.

1.3 Objectives

The main purpose of this report is to discuss briefly about my internship at AIUB CS Development Team. This reports includes narration about how I accomplish my internship, the challenges I face while working in the project, my working techniques and responsibilities etc. It reflects my internship journey which is obligatory to complete my bachelor's degree in American International University Bangladesh.

I was assigned in the AIUB FST Website Development Project as a frontend developer and I was intended to get prepared for the professional career ahead. I learned how to work under pressure, how to manage complicated situation, how to develop a website efficiently, how to deal with my colleagues and supervisor, how to take part in the real project development and fix problems. This internship also assist me to distinguish between my ability and my lacking.

2. ACTIVITIES

Narrative discussion of the activities undertaken in relation to the report. These activities can be focused on the assigned task by the organization or any interest about the whole organization.

In this portion, the objectives are stated in an appropriate way. The internship program allows an internee to take part in practical project related to the field of study. One can understand the responsibility of an employee and how to meet the deadlines. It introduces a person with the professional environment of a workplace and how to work efficiently under the guidance of the professionals.

2.1. Work-Related

As a part of my internship program I joined in the AIUB CS Development Team. I was assigned as a frontend developer at AIUB FST Website Development Project under the CS Development Team. The AIUB CS Development Team works under the Faculty of Science and technology and the main responsibility was to develop a web based portal and a website for the administrative works and faculty information of FST.

To work in the project I learned Laravel MVC framework and the development work was based on the server side language PHP. As a frontend developer I designed the whole FST website and portal. I used Bootstrap as the front-end user interface component library. Using the bootstrap toolkit with HTML5, CSS3, Java Script and JQuery I have developed the architecture and UI design of the FST website and portal. To do the frontend and backend development work at the same moreover to get the updated work of the whole development team we used GitHub (version Control) web application and software.

It was a remote job. So most of my works are done at home and I submitted my work immediately by using GitHub. Sometimes I worked in the Faculty cubicle of AIUB with my other colleagues too. In every week there were one or more meeting regarding the development process, task allocation, problem identification and solution, planning of AIUB FST website and portal. In addition attendance in these meeting was compulsory for me and my team mates and we all have to present our work to the project manager as well as to the senior developer. After successfully done every assessment fulfilling the requirements provided earlier.

At the very beginning, I was instructed to learn laravel framework and its pros and cons. Then I got an assessment to do a sample CRUD operation using laravel. After successfully done with the assessment a project demo design pattern was provided and the project manager told me to design a responsive layout of the project with proper designing components. Then in the next meeting I was instructed to design a admin page with the necessary options and functional static content. After designing the admin page it was initially not appreciated by my senior leads. So I further designed the admin page with a different architecture and layout with a few major changes in the view. After accomplishing the admin page I was told to design a demo home page using my own imagination and ideas I got from the provided design pattern. After designing these two demo pages I was told to design the final architecture and designing layout of the FST website. In the next meeting the designing layout and architecture got approved and some more self-study was given regarding frontend design. Moreover at the same time I was instructed to design the home page of the website with necessary functions and some requirements were given.

The main project development work has started in full swing. The backend developers were developing the database, automatic authentication, role based access control etc. After completing the design of the home page I presented it to my project lead and project manager and after making some changes according to their suggestion it got approved. Then I along with the backend developers were instructed to develop the admin panel. In the mean time to work in a parallel manner we started using GitHub version control. I used SVN as a helper to update and commit my works in the GitHub official repository. Day by day we developed all the features of admin panel and continuous meetings were held to see the progress as well as to provide us new requirements and features list. While developing the site some problems occurred and we needed to modify our work to fix those bugs. The main database was developing at the same time. I designed the admin panel in two main section, such as: the Profile and the Dashboard. A big issue was there with the role based access so I needed to undertake a huge change in the design of the Admin page. A huge modification on the design was done by me in the Admin module. Due to the role based access, the admin page and the faculty page were quite similar. After finalizing the Admin module I started to design the faculty module which was similar to the design of admin panel with a few subtraction in the design. After completing the whole faculty and admin portion I was instructed to modify the design of notices, events and news in the home page with some additional requirements. After modifying the home page my supervisor told me to design a login page and add some more features to the faculty and admin header. There were some minor changes regarding color combination of the homepage and admin-faculty page too.

In the next meeting after a brief discussion about the development work done so far, I was directed to design the pages and the functionality that will show after clicking the content of the navbar and homepage. Then I designed the under-graduation page, post-graduation page, view all posts page, faculty and administrative stuffs page. In next two consecutive meeting my works were reviewed, discussed and approved by the project manager. Then I was instructed to add validation to all the CRUD functions and a new design contains message from the executive body of FST. After accomplishing these works I was told to replace a parallax image with a tile view of ACC works and events. After completing all these designs I attended some meeting to finalize the design and to discuss about the problems and probable solution of those problems. Then we found some issues in the designs and backend works. We list those issues and tried to solve one by one. Then a meeting was held to show and discuss the overall development works. After brief discussion from the developed projects and the issues our project manager was satisfied with our work till that date. He instructed the senior leads to send the project to the testers. The tester then test the project and found out some bugs and issues. Then I checked the list of issues and mark the problems regarding the frontend design to solve them. The issues are solved already. This is how me along with my co-developers worked in the project to develop a technically advanced, efficient FST website and portal.

The workload of the project was distributed by tasks and each task had a fixed deadline and I had to complete my work by that time. I had to maintain time properly to maintain the work schedule of the project. I tried my level best to do my work properly and I am quite happy to see my project manager as well as the leads are happy with my work.

2.1.1 Some Screenshots of AIUB FST Website

Home Page:

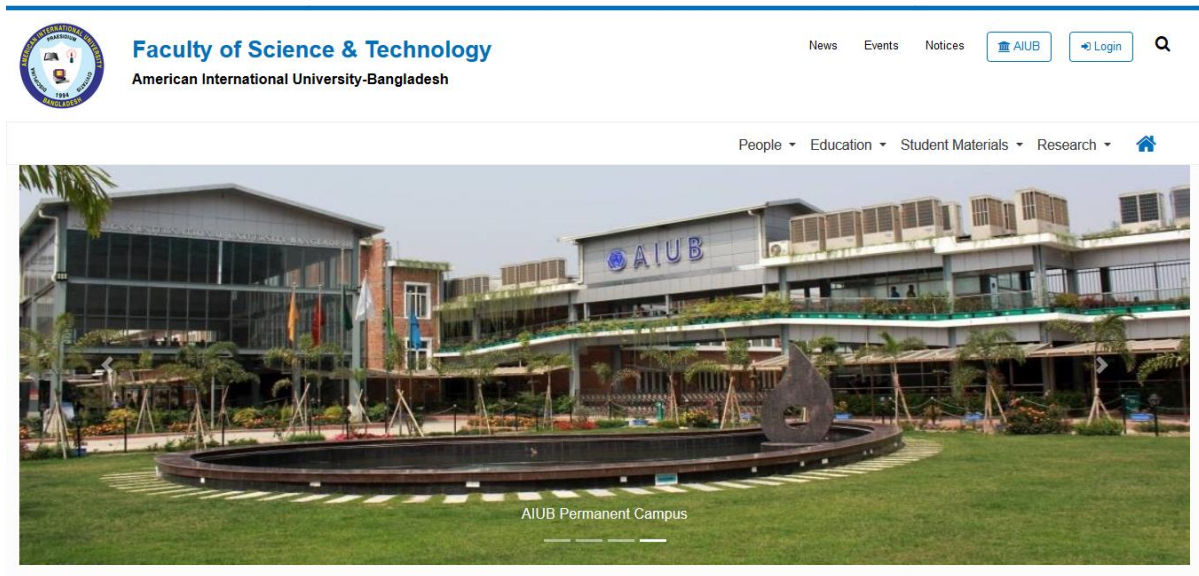


Figure 1.1: Home Page of FST Website.

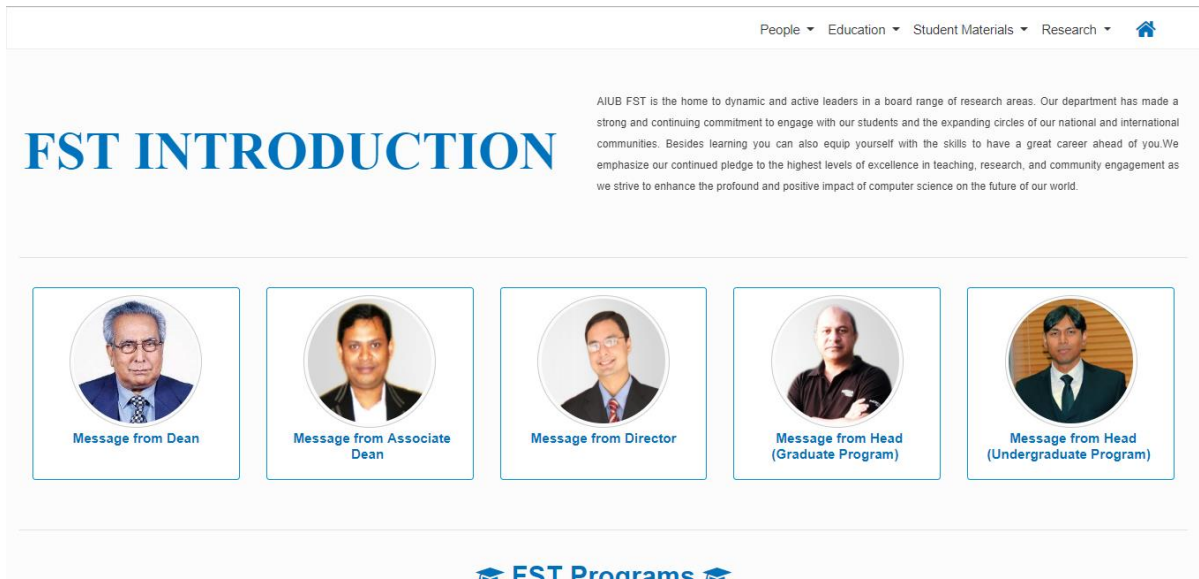


Figure 1.2: Home Page of FST Website.

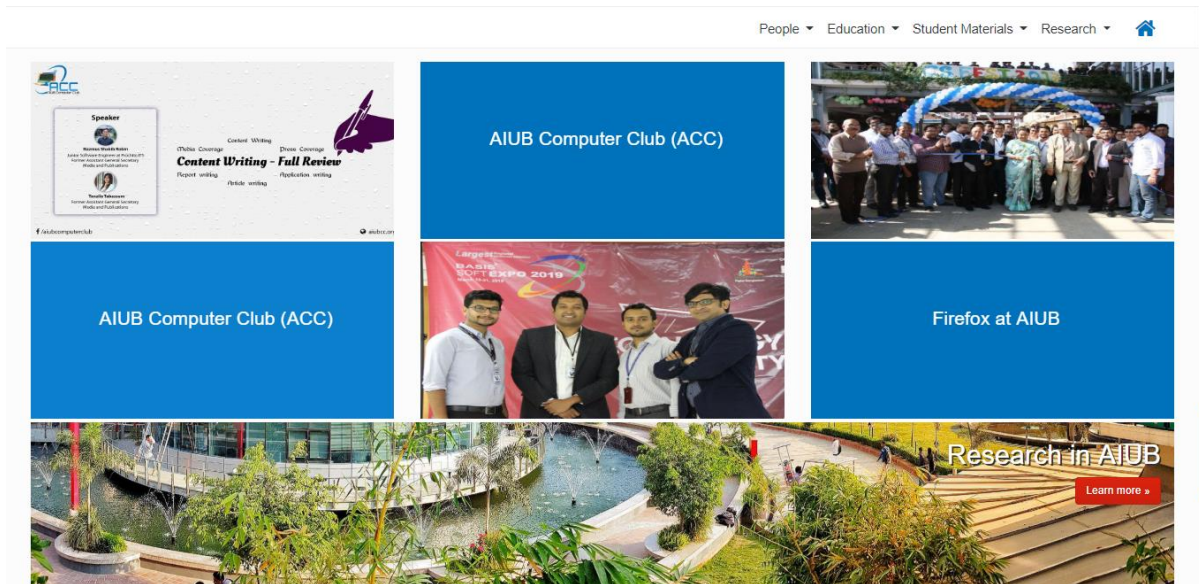


Figure 1.3: Home Page of FST Website.

Login Page:

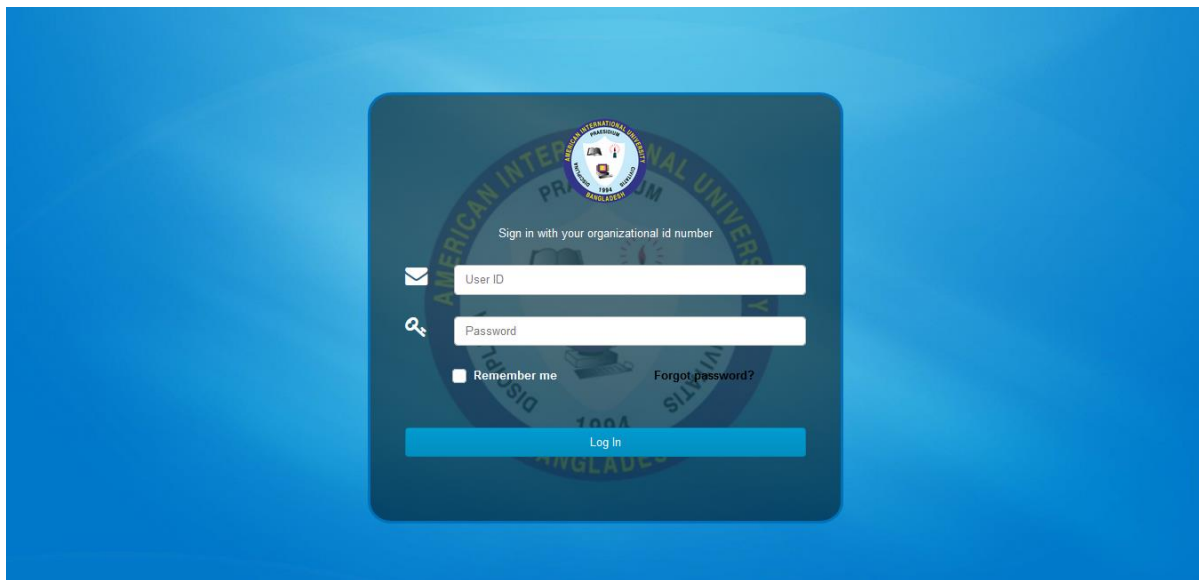


Figure 2.1: Login Page of FST Web-Portal

Admin Page (After Log-in):

Faculty of Science & Technology
Faculty Portal

Welcome, admin

admin
Lecturer, Computer Science
admin@aiub.edu
01799999966
[Change Password](#)

Qualifications

MSc	American International University-Bangladesh
BSc. in CSE	American International University-Bangladesh
HSC	ABC College
SSC	ABC School

Biography
I am working as a lecturer in American International University-Bangladesh

Research Interests ▾

Publications ▾

Address
Home Address:Dhaka, Bangladesh

Figure 3.1: Admin Profile of FST Web-portal.

Faculty of Science & Technology
Faculty Portal

Welcome, admin

Admin Panel

Create Course

Course Code
Enter Course Code
Please follow the convention

Course Name
Enter Course Name

Department Name
--- Choose A Department ---

Course Type
--- Choose A Course-Type ---

Figure 3.2: Admin Dashboard of FST Web-portal.

Faculty Page (After Log-in):

The screenshot shows the Faculty Profile page for DR. MAHBUBUL SYEED. The header includes the Faculty of Science & Technology logo and name, a notification bell with 5 alerts, and a Logout button. The main content area is divided into a left sidebar with a profile icon and a main section. The main section features a profile picture placeholder, the name DR. MAHBUBUL SYEED, a phone number 1701-1771-2, and a title Associate Professor, Computer Science. Below this is an email address mhabbul.syeed@aiub.edu, a phone number 01977997799, and a Change Password link. The main section also includes a Welcome message, a Qualifications section listing degrees from PhD to SSC, a Biography section with a short bio, and expandable sections for Research Interests, Publications, and Address.

Faculty of Science & Technology
Faculty Portal

Welcome, MAHBUBUL

DR. MAHBUBUL SYEED
1701-1771-2
Associate Professor, Computer Science
mhabbul.syeed@aiub.edu
01977997799
Change Password

Qualifications

- PhD in Software Engineering
- MSc. in Software Engineering
- BSc. in CSE
- HSC
- SSC

Tampere University of technology
Tampere University of technology
Islamic University of Technology
Rangpur Cantonment Public School and College
Rangpur Zilla School

Biography

I am working as a Associate Professor and Head-in-charge, Undergraduate Program, FST AIUB.

Research Interests ▾

Publications ▾

Address

Figure 4.1: Faculty Profile of FST Web-portal.

The screenshot shows the Faculty Dashboard for DR. MAHBUBUL SYEED. The header is identical to the profile page. The main content area features a Welcome message, a navigation bar with links to My Courses, My Profile, Research & Publications, and Resource. Below the navigation bar is an Add Courses button and a table with columns for Course Name and Credit Hour.

Faculty of Science & Technology
Faculty Portal

Welcome, MAHBUBUL

My Courses My Profile Research & Publications Resource

Add Courses

#	Course Name	Credit Hour
---	-------------	-------------

Figure 4.2: Faculty Dashboard of FST Web-portal.

Faculty page (User view):

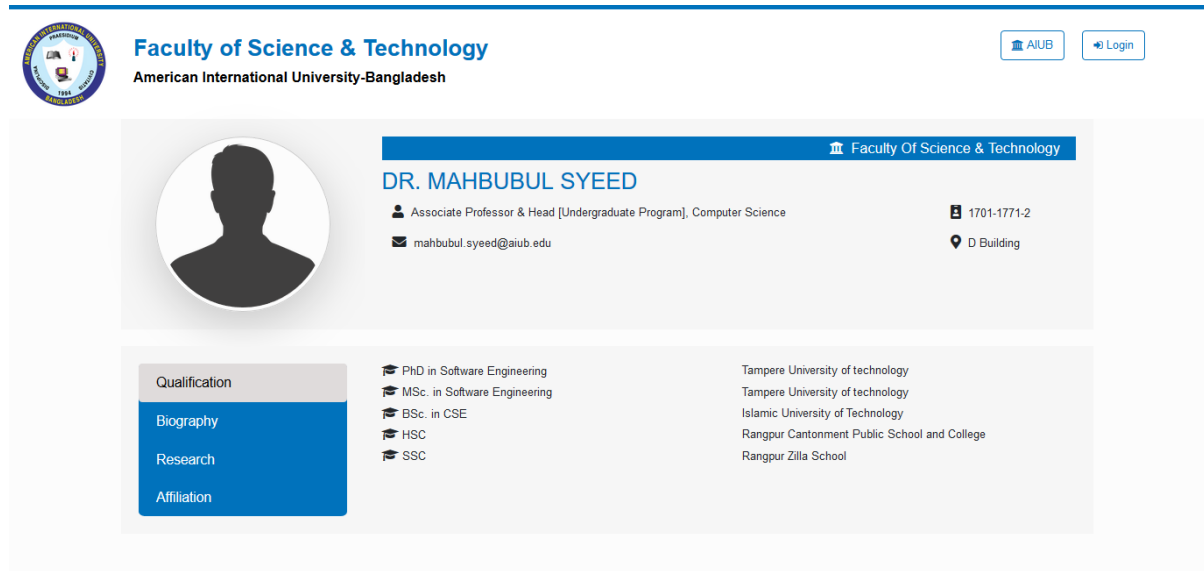


Figure 5.1: Faculty Page (User View) FST Website.

2.2. Organization-wide

I worked in the AIUB FST Website Development Project of AIUB CS Development Team under Faculty of Science and Technology, American International University-Bangladesh. AIUB CS Development Team is committed to provide quality full, automated web based portal and website for FST. I was assigned as a frontend developer in this project and I designed the whole UI. My work responsibility was to develop the design of any feature of this project with static content. The backend developers used to develop the content dynamically and they also implemented the functionalities of any feature. Sometimes while developing the backend, the developers found issues in the UI and because of that I needed to modify my design and fix those issues. In some cases while the backend developers were developing their part, they found logical problems in the provided requirements or content. That's make me do necessary changes in the frontend. So my contribution and responsibilities to this project helps the backend and database developers to show their works properly in the UI and vice versa. This project is for FST, AIUB. So my work will help the students, faculties and admins of FST to operate and view information.

2.3. Other Relevant Activities

My work was to design the whole FST website and portal of American International University-Bangladesh. As a frontend developer my main focus was to design the layout and components of FST website maintaining a responsive architecture. I did not have that much of other relevant activities and responsibilities rather than attending some unofficial meeting to discuss the project work, understand the project outcomes and progress properly furthermore to make a better bonding among ourselves. Moreover sometimes I helped the backend developers to do their work properly. There was another project regarding Research Portal (RP) of FST which was related to the project I was working on. So I along with my fellow developers help the RP team to plan and develop their project.

3. CONSTRAINTS/CHALLENGES

3.1. Identified/Observed in the Organization

I am studying in Bachelor of Science in Computer Science and Engineering since 2016 at AIUB. So it was always one of my heartiest desire to work as a developer or academic employee of AIUB. Joining as a front-end developer in the FST Website Development Project of AIUB CS Development Team under Faculty of Science and Technology paved the way for me to quench my cordial desire and gave me an opportunity to work in an auspicious project of FST.

The working environment in AIUB is wonderful. My senior colleagues, team lead and project manager all were very generous, friendly, well behaved and helpful towards me. Few of my team associates were respective faculty members of AIUB, without their proper guidance it may not be possible for me to do my assigned job accurately. I will ever be grateful to them for their tremendous support and co-operation during my internship period. Whenever I faced any issue regarding the project, my fellow team mates and respective leads helped me solve the issues and they helped me to understand the project outcomes as well as the efficient procedure of developing the project.

At the very beginning of the project I was not proficient in laravel framework. Then my project manager and the senior backend developers suggest me to take an online course related to laravel 5.0 and they also trained me to be skilled in laravel as well as PHP. After working here for almost three months, I must appreciate and applaud the working environment of AIUB specially the AIUB CS Development Team.

3.2. Academic Preparation

Academic Preparation and learning enables individuals to become skilled at knowledge that is educational, scholastic and theoretical. Its main concern has been the development of specific, instrumental and technical skills.

3.2.1 My Experience

In my opinion academic learning and tasks are quite different from the tasks and working procedure of the professional project. Only the academic knowledge and lessons are not good enough for job sector. Academic learning does not make us expert in any field. In professional career, the organization seek experienced, well mannered, punctual, enthusiastic, hardworking and confident employee who has proper knowledge in the required field with ability to work in a team. These qualities cannot be developed in the academic life of a student, in the under graduation life we got the initial level of knowledge in the field of our study. Then in the professional career we gather experience and more in depth knowledge about our own sector.

Though academic knowledge and assessments are different from the organizational ones but it increases our confidence and provides us with necessary knowledge to face the challenge and workloads of job life. In my case, I was quite skilled in the field of UI design from my academic life doing some academic projects and assessments. I did not have to take pressure for preparing me for this position rather I reviewed my knowledge before started working in the frontend. In academics, not all the pros and cons of a topic are covered so it is important to have the desire of self-learning. I also needed to learn some new items regarding my work responsibilities which was not discussed in my academics. Learning laravel, bootstrap 4 components in depth, media queries etc helped me to make my knowledge base stronger for future and it also polishes my previous knowledge. While working in the project I learnt how to make responsive designs for a site and how to accomplish the assigned tasks in time before the deadline.

3.3. Personal/professional Skills

Initially when I started working as a developer in this project I was nervous and ambiguous about the development process. I never worked in a professional project like this. I had previous knowledge and few experience of designing the UI of a site but in that time I need not to be concerned enough about the responsiveness and efficiency of the design and architecture. I faced a bunch of challenges at first but I took them as a self-learning motivation. I used to know a lot of terms theoretically but never implemented those in academic projects. While doing this intern I need to implement those things accurately in a professional way. I learnt how to code professionally maintaining the standard

convention. My experienced supervisors and senior developers helped me to understand the professional way of developing website. They trained me how to manage critical condition, be punctual in work, how to maintain good relation with colleagues and be a team player. Gradually I gained much experience about professional development process and learnt a lot of new things regarding my field of study and project, these things boosted up confidence to face the future challenges.

During my internship the main issue was a have a very limited knowledge about PHP and web development. My knowledge base was not enough for the real life web designing, responsive and mobile first UI design. Also I was instructed to develop some features that was unknown to me moreover this is the first time when I needed to learn the framework laravel 5.0 implement other stuffs in my project. Git version control gave a tough time initially. I never used git professionally before. Many designing components and libraries were needed to do the design the FST website perfectly that so I learnt those necessary things and implemented it with the help and guidance on my project associates. Advanced features, functionality and technologies are not taught and practiced in the academics. I took this internship as an opportunity to learn those advanced technologies and professional way of development so that I can be a capable future candidate in the field of frontend development.

4. ACQUIRED KNOWLEDGE

4.1. Consequences to Organization

It is very important to choose the organization and the field in which the candidate is going to work. One cannot be proficient in every side of his/her field of study so a fixed career target is needed to do well in professional life. Career goal and desired field of work should be selected by the candidate before starting the very first professional job or internship.

I always wanted to be a frontend UI developer so when I saw the circular of AIUB CS Development Team I applied to be a part of the development team and after a well-organized selection process I got this opportunity to work in AIUB. During my internship every day I had the opportunity to learn something new and acquired some professional skills from the project and project associates. I gathered a lot of experience of organizational work environment. After working for few day I was confident that this experience of internship in AIUB CS Development Team will surely help me to be a potential developer. I learnt is how to develop a professional project and how to work as a team player. I really enjoyed my work and working atmosphere during this internship program and I belief this internship program will be a beneficial one for my future career. Indeed it was a great opportunity for me.

4.2. Implications to University's Internship Program

Internship program is a very crucial part of post academic life. It is a proven way to gain relevant knowledge, skills and experience while stablishing important connections in the field of expertise and study moreover internships paved the way to be a potential and skilled candidate for future jobs. Internships are also a way to get your feet wet and find out if a specific field is something you could see yourself doing full-time jobs.

I was lucky enough to do my internship here at AIUB CS Development Team under FST, American International University-Bangladesh (AIUB). It was a pleasure and at the same time an honor for me to work here as I am a student of this university. I would like to thank my industrial supervisor and other senior and fellow associates for their immense support while pursuing my internship. With the

guidance and useful advice of senior developers and leads, I learnt a lot of things and became a better skilled, professional individual.

4.3. Effects on Personal/Professional Skills

This internship has affected verily on both my personal and professional life. I enhances my skills as a developer and taught me how to work in an organizational atmosphere. On the other hand it uplifts me as a human being by improving my communication skills with others, I learnt how to behave professionally and gave me knowledge about professional ethics. Practical and professional work experience was the primary goal of this internship program but it also educate me with some other valuable lessons. I am going to discuss some of the core reasons briefly in the following.

4.3.1 Being a Self-Learner

In academics, when I faced any problem or could not understand any topic or item I had my respective faculty members to ask and learn things, in addition they used to teach us every topic in class or counseling hours. But in professional life, the organization or the team leads just provides me the requirements and told to design any feature briefly. Then the rest of the works should be done by me in time and if I am not good enough to solve that assessment, I better learn that myself because the project leads or seniors did not teach me in detail what I need to do or what are the assertion of that task. They will guide me and suggest me ways to accomplish the task. So during this internship I faced a bunch of new challenges and it taught me to learn new technologies and components of web development by myself.

4.3.2 Attitude

One of the main focuses of internship is to grow professional attitude amidst the internee. Throughout my whole journey as an intern I was always keen to learn new things and this kind of attitude is very important as a trainee. New challenges were there in every single day, during my internship I learnt how to overcome those challenges effectively. I industrial supervisor always told me to show positive, hardworking, passionate, rational, enthusiastic attitude towards work and this advice helped me to deal

with new challenges and technologies. Moreover I learnt how to behave and interact professionally with my fellow team mates and seniors. Proper attitude with the senior and experienced associates of the team helped me a lot to overcome problem during the internship period.

4.3.3 Enthusiastic

Internship gives us the first professional experiences in our life. So being enthusiastic is one of the key characteristics for any employee to be a good professional developer. One need to be afraid and keen to take challenges during intern. Sometimes I needed to code for more than ten hours a day to finish my assigned work in time. It is very important to be punctual and passionate towards work and eager to learn and implement new advanced technology and features.

4.3.4 Being a Team Player

In professional life it is very important to have the ability of working in a team. No developer can single handedly develop and maintain a big project. So a dedicated team is needed to develop a project perfectly. If one cannot be a good team player, he/she will not be able to pursue professional goals in future. While working on this project I have learnt how to deal with my fellow team mates, how to cope with them, how to behave professionally, how to maintain mutual respect towards each other and more importantly how to work in parallel manner. Without the help of my cordial and cooperative team members it would not be possible for me to design this project nicely.

4.3.5 Decision Taking Ability and Judgement

Decision taking ability and judgement is a matured term to refer. Sometimes it is hard to take right decision on right time regarding the development of any project. The ability of judgement is not generated within a day or in a month. This quality grows up gradually with experiences. As the only front end develop of this project sometimes I had to take quick decisions on designing any portion of the site. I learnt how to take appropriate decisions on time. In last three months with the experienced I tried to develop my skill on judgement and quick decision taking ability.

4.3.6 Punctuality

Being punctual and productive at the same time is the primary objective of a professional. Firmness was an inexistent affair for me throughout my internship period. I tried my level best to use my time properly for greater productivity. However, if there was any possibility to miss the deadline to submit any task, I always informed my team lead earlier and requested to extend some time. I really hope that my punctual and disciplined behavior will pave my way to success and to pursue my goal.

4.3.7 Confidence

Initially I was nervous as I had no previous experience on working in a professional project. After working for few days I started being confident about my capabilities and working knowledge. I solved many issues and design the whole website and web-portal gradually. Internship program makes a internee confident about his/her own work, qualification and ability to accomplish any task. Now I am more confident than before to face any kind of professional challenges and now I know I can work in real professional projects.

5. CONCLUDING STATEMENTS

5.1 Summary

Internship program inaugurate a student with professional career and real working environment. Indeed it was a wonderful experience for me to work in AIUB CS Development Team. It was a new and challenging part of my life and throughout this program I understood the responsibility of a professional and how to work in a professional web development project.

The internship program has made me more confident, responsible, skilled, hard-working and passionate as a professional. During this period I have learnt a bunch of new technologies and enhanced my professional skills as a front-end developer. It helped me to develop good understanding about advanced, efficient techniques of UI and to improve my decision taking abilities moreover amplified my analytical and problem solving skills and so on.

Professional life is different from the academic life and things work differently here. It is very important to cope up well with the colleagues in professional career. One needs to follow the instruction of seniors cordially and maintain a mutual respect among the team mates. This internship program helps me a lot to understand the professional culture and attitude and works accordingly.

At last, I want to acknowledge my gratitude to my Project lead, Project manager, Senior Developers and my fellow associates. Without their help and support I may not be able to fulfill my responsibilities as a frontend developer of the project. The knowledge and experience I got from this internship is invaluable and it will surely help me in my career ahead.

5.2 Recommendations/Suggestions for Future Strategic Actions

5.2.1 Organization

Firstly I am obliged to American International University-Bangladesh (AIUB) for giving me this magnificent opportunity to take part in such a significant project of Developing the website and web-

portal for Faculty of Science and Technology as a frontend developer. Before joining the AIUB CS Development Team I could not even imagine to be a part of such a wonderful project. I am fortunate enough to work with a group of tremendous esprit persons and some of them were my respective faculties whom I admire professionally. Every person related to this project was extremely helpful and supportive. As an organization AIUB is indeed the best place to work in and any one will be fortunate if they got the chance to work in AIUB CS Development Team.

5.2.2 University

AIUB offers students to do their internship in the university, Personally, I appreciate AIUB for this consideration. I have completed my internship from the AIUB CS Development Team works under supervision of Faculty of Science and Technology, AIUB.

There are some recommendations I want to narrate briefly. Some facts need to be focused and some actions need to be taken by the AIUB authority to make the internship program more fruitful and interesting. A lot of students want to do their internship in software firms but unfortunately a good number of students failed to get their desired intern opportunity within the due time. It will be a great initiative if AIUB recommends their students to the software farms and make opportunities for the students to get internship in the software farms according to their capabilities. Arranging job fair twice in a year can pave the way for the students to get desired internship convenience. Students cannot connect themselves with the software firms and they do not find enough scope to get internship as they do not know about the industry well. A few of the courses in our curriculum provide the scope to visit an industry or a company to analyze their environment and gather necessary data that might help us to understand the software industry and get connected with the firms. But not all the faculty members allow their student in those courses to visit the software firms. AIUB should take steps so that students can visit the software firms and companies during their under graduation.

5.2.3 Personal/Professional

Professional life is completely different from the academic life and the responsibilities are also different as a professional. One cannot simply get the professional skills during the under graduation. In our academics we get the primary and basic level of knowledge that is not enough to develop a professional project. So self-learning ability and capability to work as a team player is very important in professional life. The students should try to adopt these qualities from their student life. Maintaining mutual respect

with the colleagues and value their ideas and suggestions are important in professional life. I learnt from my internship that seeking help from the seniors while facing any kinds of problem in professional life is not a matter of contempt. The intern employee should ask for help from the assigned supervisor or from the seniors if anyone faces any kind of difficulties. I learnt a lot from my seniors in this project both personally and professionally.

6. RECOMMENDATION LETTER



AIUB
AMERICAN INTERNATIONAL UNIVERSITY- BANGLADESH

6. RECOMMENDATION LETTER

TO WHOM IT MAY CONCERN

This is to certify that, RAHMAN RAHAT, ID 16-30975-1 has served as a **Front-end Developer** under my supervision. He worked as a developer for FST website development project in "Spring 2018-2019" semester, as a form of internship offered by the Faculty of Science and Technology.

His performance was satisfactory and attendance was regular. During this period, he adhered to all rules and regulations of this university and did not involve in any non-disciplinary activities, to my knowledge.

I wish his every success in life.

A handwritten signature in black ink, appearing to read "Mishu", written over a horizontal line.

DR. MD. MAHBUB CHOWDHURY MISHU
Assistant Professor
Department of Computer Science
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Figure 6.1: Recommendation Letter

7. REFERENCES

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