

Industrial Workshop Report



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Submitted to

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Industrial Training, Collaboration, Accreditation, and Placement Committee
(ITCAP)

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Declaration

I hereby declare that except where specific reference is made to the work of others, the contents of this report are original and have not been submitted in whole or in part for consideration for any other degree or qualification in this, or any other university.

Rahul Sikdar Pranto

ID: C171096

Acknowledgement

I am thankful to my parents, IIUC and the host to give the opportunity of industrial workshop.

Abstract

The industrial training aims to provide knowledge about practical training of different applications in particular time frame. It integrates a fundamental component to improve the key ability needed to improve the students capacity to work in job field. It gives the students knowledge and encourages them to be successful. Moreover, it guides them to choose career option with various work environment and that best suits them. They are made aware of the latest technologies that are used by many companies. This program helps graduates to have better knowledge about work and experience. This report is well-explained and easily understood by everyone.

Some of the objectives of industrial training are:

1. To make them able to work with new software applications
2. To develop confidence and spirit in a student
3. To teach students about skills required in particular application
4. To encourage and motivate them to work
5. To guide students about the steps needed to get a job
6. To develop skills in working with a team

At the end of this program, students have confidence to work in new platforms and are aware of the steps that are needed to become a successful engineer.

Main Report

Section 1: Introduction

Industrial workshop aims for the graduates to provide them with knowledge and introduce to them the latest technologies used. It brings the students and professionals from many reputed companies for a specific period of time. They exchange knowledge and experiences with the graduates guiding them to become a successful engineer. It builds confidence in a students life and guides students who are ready to face the professional work life. The training program provides many IT and program related knowledge which helps a student a lot. This types of workshop can reduce the gap between industry level experience into a freshers.

Section 2: Profile of the Industry

PALO ALTO Networks, Inc.:

PALO ALTO Networks, Inc. is an American multinational cybersecurity company with headquarters in Santa Clara, California. Its core products are a platform that includes advanced firewalls and cloud based offerings that extend those firewalls to cover other aspects of security. The company serves over 70,000 organizations in over 150 countries, including 85 of the Fortune 100. It is home to the Unit 42 threat research team and hosts the Ignite cybersecurity conference. In 2018, Palo Alto Networks was listed 8th in the Forbes Digital 100. In June 2018, former Google and SoftBank executive Nikesh Arora joined the company as Chairman and CEO.

SELISE:

SELISE is a software firm engaged in the creation of digital platforms from strategy to execution. Our understanding of information technology and the internet helps us enhance business performance across industries. We serve Insurers, Retailers, Telcos, Advisors, Sport Clubs, Civil Engineers and many more. SELISE is a Swiss owned Software Engineering and Business Consulting company. Selise also has their office in Dhaka. SELISE goes by the motto, “We innovate, structure, run and. The value proposition of SELISE revolves around consumer-centric cloud and mobile solutions.

CEFALO:

CEFALO is a Norway based software development and IT service provider company with its development center in Dhaka, Bangladesh and headquarters in Oslo, Norway. We have 100+ highly skilled software development consultants working with the latest web, mobile and cloud stacks along with micro-service architecture and CI/CD pipeline, exercising industry standard principles & best practices to build scalable, high performance & robust software solutions for some of the big players in Europe. We are also working with Manual and Automated Software Testing, AI, Machine Learning, Business Intelligence, Data Science and Industry 4.0 technologies.

Work based on:

Web & Mobile Apps Development

- Custom Software Design and Architecture
- Agile Software Development
- Software Testing and Quality Assurance

- Industry 4.0 technologies

ASAI:

ASA International is a global microfinance company that provides affordable financial services to enable low-income female micro-entrepreneurs enhance their business and increase incomes for themselves and their families. Given ~750 million underserved women across Asia and Africa, ASA International was founded in 2007 to utilize the award-winning ASA model of microfinance with a mission: to achieve socioeconomic progress of low-income communities via financial inclusion.

Rakuten Group, Inc.:

Rakuten Group, Inc. is a leading global company that contributes to society by creating value through innovation and entrepreneurship. It is a Japanese electronic commerce and online retailing company based in Tokyo, founded by Hiroshi Mikitani in 1997. Centered around Rakuten Ichiba, its business -to-many EC platform and one of the largest e-commerce sites in Japan, its businesses include financial services utilizing fintech, as well as digital content and communications services such as messaging app Vibre, e-book distributor Kobo, and Japan's fourth mobile carrier Rakuten Mobile. Rakuten has 14,826 employees worldwide, operating in 29 countries and regions, and its revenues totaled US\$ 7.2 billion with operating profits of about US\$347.9 million as of 2016. It is often referred to as "the Amazon of Japan". Its major investments include Buy.com (now Rakuten.Com in the US), Priceminister (France, now Rakuten.fr), Ikeda, Tradoria, Play.com, wuaki.tv, Ebates, Viki, The Grommet. The company also has stakes in Ozon.ru, AHA Life, Lyft, Cabify, Careem, Carousel and Acorns.

Robi Axiata Ltd:

Robi Axiata, the 2nd largest mobile network operator in Bangladesh currently owned by two major stakeholders being Axiata and Bharti Airtel. In this company, Axiata of Malaysia holds a major controlling stake of 61.82%, Bharti Airtel of India holds 28.18%, and remaining 10% stake is held by investors in DSE and CSE. Robi first commenced operation in 1997 as Telekom Malaysia International (Bangladesh) with the brand name 'AKTEL'. In 2010 the company was re-branded to 'Robi' and the company changed its name to Robi Axiata Limited. Robi Axiata has spectrum on GSM 900, 1800 and 2100 MHz bands.

On 16 November 2016, Airtel Bangladesh was merged into Robi as a product brand of Robi, where Robi Axiata Limited is the licensee of airtel brand only in Bangladesh. Having successfully completed the merger process, Robi has emerged as the second largest mobile phone operator in Bangladesh. [As of May 2021, Robi and Airtel has more than 50 million customers.

Honor Smartphone Bangladesh Ltd:

Honor (stylized and marketed as HONOR) is a smartphone brand owned by Shenzhen Zhixin New Information Technology Co., Ltd. It was formerly owned by Huawei Technologies. As part of the former owner Huawei Consumer Business Group dual-brand strategy, Honor provides smartphone handsets targeting young consumers but has released tablet computers and wearable technology as well.

As of 2016, George Zhao serves as global president of Honor. On 17 November 2020, Honor was acquired by Shenzhen Zhixin New Information Technology Co., Ltd.

Section 3: Profile of the resource persons

Session 1:

Md. Mahabubul H Masud
Sr. Staff Software Engineer,
Palo Alto Networks Inc, California.
Ex. Sr. Software Engr.
Apple inc.

Session 2:

Ratan Sunder Parai
Senior Software Engineer
SELISE

Session 3:

Md. Mahedee Hasan
Head of Software Development
ASAI Management Services Limited

Session 4:

Shaon Dey
Software Engineer
Cefalo

Session 5:

Shaiful Islam (Saif)
Applications Engineer (Team Lead)
Rakuten Group, Inc.
Tokyo, Japan

Session 6:

Faisal Ahmed
General Manager, Innovation and Branded Digital Services
Robi Axiata Ltd

Session 7:

Muhammad Toufiqul Islam
Country Director,
Honor Smartphone Bangladesh Operation.

Section 4: Resume of the student

Rahul Sikdar Pranto

Full Stack Web Developer

I am a full-stack web developer. I am passionate for building web applications and working across different technologies. I am seeking a challenging career with a dynamic organization that provides the opportunity for development.

sikdarrahul0@gmail.com ✉

+8801833904498 📞

Github Repo 📁

Linkedin Profile 🔗

Portfolio Website 🌐

SKILLS

Expertise: HTML, CSS, BOOTSTRAP, JAVASCRIPT, REACT JS, REACT ROUTER, NODE JS, EXPRESS JS, MONGO DB.

Comfortable: C PROGRAMMING, C++, PYTHON, MySQL.

Familiar: REDUX, JQUERY, JAVA , PROLOG, MATERIAL UI.

TOOLS

Git, Chrome Dev Tool, VS Code, Atom, Code blocks, Firebase, Netlify, Heroku.

PROJECTS

● Talent Hunters | [Website](#) | [Github\(Frontend\)](#) | [Github\(Backend\)](#)

- ★ Showed different types of jobs on the home page by different selecting.
- ★ Employers can post a job.
- ★ Candidates can find their desired job and apply to the job.
- ★ Admin can approve or remove job posts.

Technology: React, React-Router, React- Bootstrap, Express js, Multer, Mongo DB.

● Mayaful | [Website](#) | [Github\(Frontend\)](#) | [Github\(Backend\)](#)

- ★ A full stack volunteering community web application.
- ★ Admin can add new upcoming events.
- ★ Users who are interested to join mayaful events can register here.
- ★ Users can find blood donors here.
- ★ Users can register as a donor.
- ★ Users can report to the admin if he will find any fake donor or other issues.
- ★ Admin can remove donors.

Technology: React, React-Router, React- Bootstrap, Express js, JWT, Mongo DB.

Education

International Islamic University
Chittagong - *B.Sc. in CSE*

April 2017 - present

CGPA: 3.58 out of 4.00 (upto 7th semester)

Experience

Teaching Assistant -
International Islamic University
Chittagong

February 2021 - July 2021

Volunteer Activities

Manobik Foundation - Member
2014-2018

★ Manobik Foundation is a Humanitarian Organization, dedicated to ending poverty and keeping a smile on everyone's face.

COURSES

Complete web development course

- Programming Hero

June 2020 – September 2020

[Certificate](#)

Section 5: Session 1 Workshop:

This session of workshop conducted by: Md Mahabubul H Masud, Sr. Staff Software Engineer,
Palo Alto Networks Inc, California.

Ex. Sr. Software Engr.

Apple inc.

Topic: A Developer Journey From IIUC to USA

Session Details: Mahabubul H Masud's session on "A Developer Journey from IIUC to USA" was really fun to watch and educational. He described how he got into the Apple, what kind of difficulties he faced and what extracurricular activities he did to get priority over other candidates. He also described his experience of getting into Google and how students can get jobs in USA easily.

The most important thing I learned from this session was about Leetcode. I didn't know there was such a fun place to code and people can start learning by from the discussions.

Website: <https://leetcode.com>

I started learning DS and Algorithm more seriously after attending the session.

Section 6: Session 2 Workshop:

This session of workshop conducted by: Ratan Sunder Parai, Senior Software Engineer
SELISE

Topic: Introduction to Web Application

Session Details: In this session, the instructor began with the story about his struggles in his early career. How he managed to overcome those obstacles to become a successful software developer motivated me a lot and boosted my confidence to carry ahead to build up my career.

He also instructed to learn JavaScript frameworks as it is the most trending and growing technology in the modern web development.

Section 7: Session 3 Workshop:

This session of workshop conducted by: Md. Mahedee Hasan
Head of Software Development
ASAI Management Services Limited

Topic: Monolith to Microservices: Software Architecture Aspects

Session Details: In this session, the instructor thought me about the difference between Monolith and Microservice. I learned that working on a big project is much easier by splitting it into many small features. This methodology is exclusively used in microservice.

I thought the session was worth the hype. After completing the session, I am more curious about microservice and keen to learn about it.

Section 8: Session 4 Workshop:

This session of workshop conducted by Shaon Dey,
Software Engineer

Cefalo

Title- A walkthrough on Conversational AI

In this session we learn about AI and how to open an Account in dialogflow and also learn how to work.

1)What is CONVERSATIONAL AI(Aka Chatbot) 2)TYPES OF CHATBOTS 3) Dialogflow 3) Chatbot platform 4) Bangladeshi chatbot 6) chatbots Globally

1)What is CONVERSATIONAL AI(Aka Chatbot)

2)TYPES OF CHATBOTS:

🎬 FAQ

🎬 Guided Conversation

🎬 Smart Home, Basic Information

🎬 Advanced Customer service

🎬 Complex Conversation Within Domain

3) Dialog Flow:

Dialog Flow is a natural language understanding platform that makes it easy to design and integrate a conversational user interface into your mobile app, web application, device, bot, interactive voice response system, and so on.

4) Chatbot platform:

Here's our selection of the best chatbot platforms. All of them include a free chatbot option, so you can try before you buy.

1. Tidio

2. Chatfuel

3. MobileMonkey

4. ManyChat

5. SnatchBot

6. IBM Watson Assistant

7. Google dialog flow

8. Rasa

9. Wit.ai

10. Amazon Lex

4) Bangladeshi chatbot:

1)HAL- Infolytx

2) Genes Infosys

Here, we also use Infolytx as example.

Section 9: Session 5 Workshop:

This session of workshop conducted by Shaiful Islam (Saif)

Applications Engineer (Team Lead)

Rakuten Group, Inc.

Tokyo, Japan

Title: DevOps/CI CD /Get yourself into large system as beginner.

In this session instructor discussed about DevOps A compound of development (Dev) and operations (Ops), DevOps is the union of people, process, and technology to continually provide value to customers. He briefly discussed about Linux – shell script.

A shell script is a text file that contains a sequence of commands for a UNIX-based operating system. It is called a shell script because it combines a sequence of commands, that would otherwise have to be typed into the keyboard one at a time, into a single script. He shows some basics of Shell Programming,

- To get a Linux shell, you need to start a terminal.
- To see what shell you have, run: `echo $SHELL`.
- In Linux, the dollar sign (\$) stands for a shell variable.
- The 'echo' command just returns whatever you type in.
- The pipeline instruction (|) comes to rescue, when chaining several commands.

Instructor also discussed about CI/CD PIPELINE, the purpose of CI CD pipeline?

The goal of the continuous integration and continuous delivery (CI/CD) pipeline is to enable teams to release a constant flow of software updates into production to quicken release cycles, lower costs, and reduce the risks associated with development. He told Why We Need CI CD?

In this session we were also made a project by using Jenkins tool. Here we used Ruby Programming Language. The Instructor advised us about our career like Behavioral tips

Section 10: Session 6 Workshop:

This session workshop conducted by: Faisal Ahmed

General Manager, Innovation and Branded Digital Services

Robi Axiata Ltd

Topic: Handle large IT projects with superior executional excellence.

In this session Instructor began with project management. Detailed discussion about executional excellence. How much Communication, Monitoring, Organization skill is important for being a good project manager. If a project manager have no Adaptability, empathy, unflappability, Leadership control then he might be face various problems in job filed. Instructor discussed about some model which is the starting point for any types of work. He shows us project management

certification which is related to Pmp, CSM, Prince 2, PMI-ACP. He told us about software development design like UI/UX design which is most popular and high demanding field for IT students. He also discuss about his Robi/Airtel apps UI/UX design. And Show some strategies about Preparation for top companies.

I thought the session was worth the hype. After completing the session, I am more curious about UI/UX design and keen to learn about it.

Section 11: Session 7 Workshop:

Conducted by: Muhammad Toufiquel Islam

Country Director,

Honor Smartphone Bangladesh Operation.

Topic- Innovation and It's market valuation .

He started with what is Innovation. He briefly discussed about Innovation process, outcome and market value. Also discussed about several types of innovations. Some strategies about new market policy. He told that a innovations impact is important. And also focused the innovation benifits. He told about new condition for Innovations, new developments in innovation. Types of innovations, The chain model etc. Value crosses one single chain is one of the Significant part of innovation. Then he show commercialization model. Discussed about strategic entrepreneurship and innovation, Future market demand and Market orientation. This session motivated me a lot and boosted my confidence to carry ahead to build up my career and discover something new.

Section 12: Career Seminar:

- We learned how to write a CV. Important points that needs to be considered while writing a CV.
- Why do we want to work software farm
- Technical questions
- What we need in job sector
- How to prepare ourselves for job sector
- Get opportunities to know about what kind of work are done in the software farm

Section 13: Good practices:

- Importance of practical knowledge
- Importance of discipline in life
- Importance of project management

- To prepare CV
- Important things to mention in CV
- Got to know about technical expectations
- Got to know about things that are expected during interview
- Got to know about questions that are asked during interview
- How to prepare for job interview.

Section 14: Career Preparation:

I learned the basics of a new web application development framework. This workshop can help me for my future career preparation. I know how to take preparation for my job life. I know about the challenges that I need to face. Moreover, I know how to take preparation for the interview. I am aware of the types of questions that I might need to face during interview.

Section 15: key-points:

Using the key points, I have made my CV. I am focusing on my typing skills. And I am learning about the technical skills that I lack on.

Section 16: Suggestions:

The workshop is very important. Increasing the duration and practical work of the workshop could be more beneficial for the participants.

References

<https://www.cefalo.com/>

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<https://en.wikipedia.org/wiki/Rakuten>

[https://en.wikipedia.org/wiki/Robi_\(company\)](https://en.wikipedia.org/wiki/Robi_(company))

[https://en.wikipedia.org/wiki/Honor_\(brand\)](https://en.wikipedia.org/wiki/Honor_(brand))