





# Mentorship Session on Student Training Program

3 sessions



#### **Zohirul Alam Tiemoon**

Co-founder & CEO
Nerd Castle Limited
https://www.linkedin.com/in/tiemoon

23+ years of experience in software development

Former SVP (Technology) Goama Pte Ltd & CTO of Databiz Software Ltd; Specialist of LICT project, ICT ministry; Ex- Lead Trainer of BITM. Trainered over 12000+ software engineers. Writer - Object Oriented Programming Book.

#### **Skill Highlights:**

- Strategic Leadership
- Specialization in distributed and scalable system design
- Collaboration & Partnership Building
- IT Training, job readiness & hiring expert
- Stakeholder management
- IT industry expertise
- Entrepreneurship
- Product development

#### Mentorship Program

- How to Secure a Job
- Understanding Professional Project Work
- Freelancing Opportunity & Project Status



## How to secure a job

- Job Market Overview: Local and International Perspectives
- Job Types: Onsite, Remote, and Hybrid Options
- Understanding Job Descriptions and Requirements
- Crafting a Professional Resume
- Enhancing Your Digital Presence on LinkedIn
- Job Application and Follow-Up Strategy
- Interview Preparation Techniques
- Exploring the Future of Employment

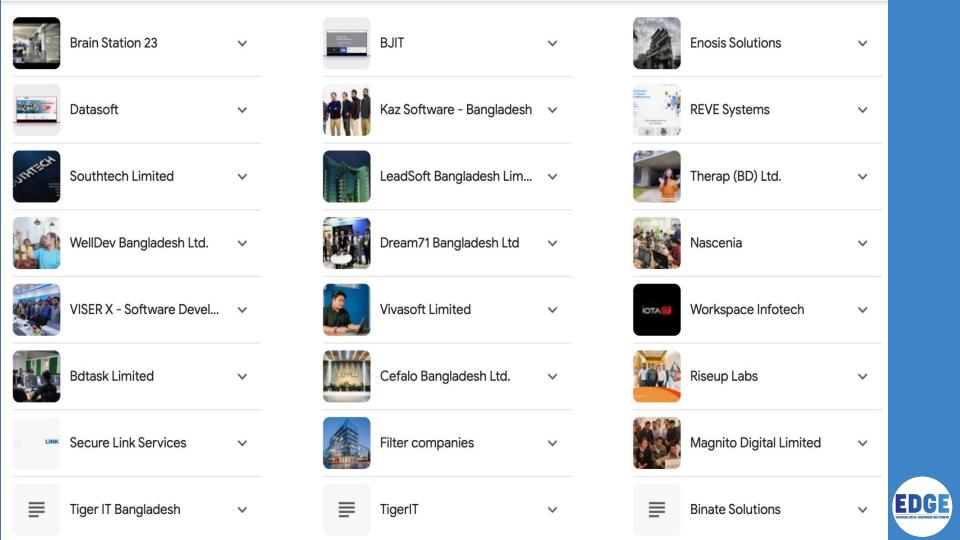


#### Job Market

Local and International

- Software developer job Globally 10% growth till 2027
- Freelancing 2000+ verticals







- Onsite
- Remote
- Hybrid







- Software company
- Bank & financial organizations
- Other corporate like telecom, garments, textile etc.
- GoB & NGO
- linkedin, bdjobs.com, Indeed,
   Glassdoor, monster.com
- Company website
- Recruiting agency



## Apply for a job

- Crafting a Professional Resume
- Enhancing Your Digital Presence on LinkedIn
- Job Application and Follow-Up Strategy
- Interview Preparation Techniques
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#### Job brief

We are looking for a passionate Software Engineer to design, develop and install software solutions.

Software Engineer responsibilities include gathering user requirements, defining system functionality and writing code in various languages, like Java, Ruby on Rails or .NET programming languages (e.g. C++ or JScript.NET.) Our ideal candidates are familiar with the software development life cycle (SDLC) from preliminary system analysis to tests and deployment.

#### Responsibilities

- Execute full software development life cycle (SDLC)
- Develop flowcharts, layouts and documentation to identify requirements and solutions
- Write well-designed, testable code
- Produce specifications and determine operational feasibility
- Integrate software components into a fully functional software system
- Develop software verification plans and quality assurance procedures
- Document and maintain software functionality
- Troubleshoot, debug and upgrade existing systems
- Deploy programs and evaluate user feedback
- Comply with project plans and industry standards
- Ensure software is updated with latest features

#### Requirements and skills

- Proven work experience as a Software Engineer or Software Developer
- Experience designing interactive applications
- Ability to develop software in Java, Ruby on Rails, C++ or other programming languages
- Excellent knowledge of relational databases, SQL and ORM technologies (JPA2, Hibernate)
- Experience developing web applications using at least one popular web framework (JSF, Wicket, GWT, Spring MVC)
- Experience with test-driven development
- Proficiency in software engineering tools
- Ability to document requirements and specifications
- BSc degree in Computer Science, Engineering or relevant field







#### Vanessa Ford

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#### **EXPERIENCE**

Software Engineer Intern

Renaud

Renaud is an information technology company which develops and provides E-Commerce Solutions

- · Contributed to development of 3 projects using python and Django
- Debugged a long pending Auto-login issue in GUI for regression platform on day 1

#### SUMMARY

I am an avid learner and user of technology, who enjoys applying my knowledge towards solving real world problems while working in groups and independently. I am committed to working hard to meet any challenges that may lie ahead. As a result of this commitment, I have an extensive project history related to data analysis and machine learning.

#### SKILLS

Coding

Java C# Javascript Python PHP Django Azure / ML

Project managemen

Trello Jir

#### **PROJECTS**

#### Predictive Algo for Fantasy Sports Using ML/NN

前 01/2021 - 11/202

FantasyPanda is a solution for forecasting the results in fantasy sports leagues.

- Using large datasets with more than 1 000 000 observations
- Up to 600 features
- · Implemented a state-of-the-art solution using Microsoft Azure Machine Learning Studio

#### Finance Tool for Amateur Sport Clubs

前 03/2019 - 04/2019

Financial CRM Software Project - Developed at Code Academy. See the repo at https://github.com/---/CRMFinanceSoftware

- The project is a Financial CRM Software which is developed for Amateur Sport Clubs to have the controls on finance (expenses & income).
- The CRM Project is a Windows Form Project which is developed in C# with the technology of Entity Framework and the approach of N-Tier Architecture.
- · Currently, working on platform change to ASP.NET MVC 5.

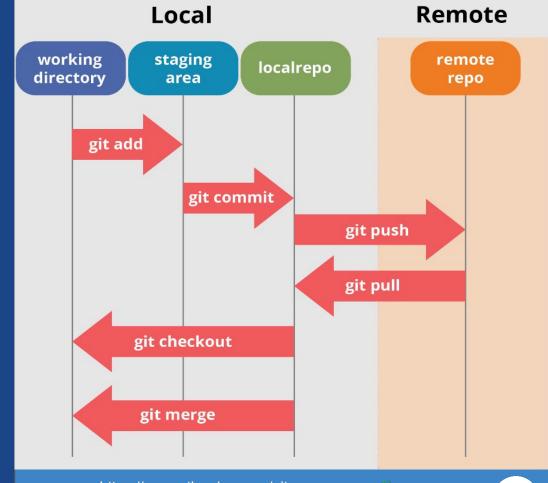
#### Your preparation – Local & Global job

- Programming competition
- Hackathon
- Project showcasing in GitHub
- DSA
- Hands-on skill on at least one tools (ASP.Net/Java/JS/React/Laravel/P ython/Django etc.)
- Database





## Git & GitHub



https://www.atlassian.com/git https://www.w3schools.com/git/



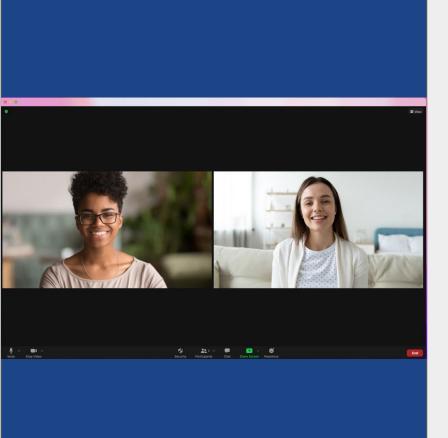




#### Professional Network







#### How to prepare for and attend an interview

- Be on-time
- Well-dressed
- Right gesture & posture
- Be Positive & communicative
- Tech & Non tech part
- Set appropriate background during online call
- Test internet, sound and camera before the interview



- Tell me something about yourself.
   Why do you want to work here?
- 3. What are your strengths and
- weaknesses?
- 4. What do you know about this company/organization?
- 5. Why should we hire you?
- 6. What is your greatest accomplishment?

  7. What is your salary expectation?
- 7. What is your salary expectation?
- 8. Do you have any questions for us?9. What are you looking for from a new position?

- What is the professional achievement you're most proud of?
- What kind of working environment do you work best in?
- Where do you see yourself in 5 years?
- 4. How do you deal with pressure or stressful situations?
- 5. How do you resolve a conflict?
- 6. Are you a team player?
- 7. How quickly do you adapt to new technology?



## Classwork - 01

- Build a CV
- Create Linkedin profile
- Create GitHub account



#### What is the purpose of a software?



What problems are solved by these web or mobile apps?



Before building a software system we must know what kind of solution it will provide to its users.







#### Teamwork - 01

Mention a software name and share what kind of solution it provides to its users



#### What are the requirements of a software

To provide the solution by building a software system, there should have several features which should be built. Collectively, these are called "Software Requirements"

Software requirements are the specifications of what a software system should do, how it should behave, and what constraints it should satisfy

See a sample

These are the user expectation from the system which is going to be developed



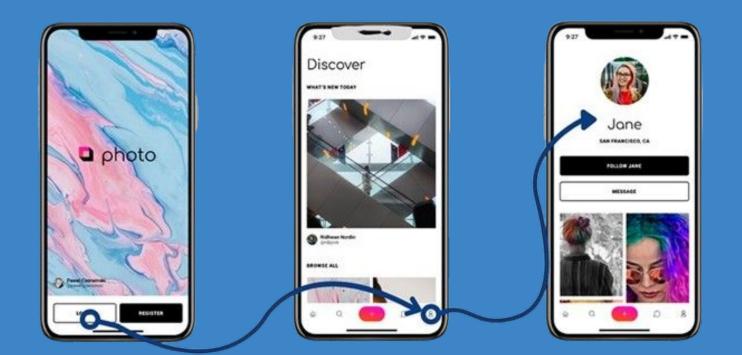
#### How to collect requirements?

To understand the requirement, the software development team conducts several interviews with the stakeholders of the system to be developed. This process is called Requirement Collection.





#### Prototype / UI wireframing









#### Teamwork - 02

Write down some functional requirement of a software.



#### User story

In Agile Project
Management,
requirements are broken
down into small pieces
which are called User
Stories

See a sample

#### **User Story** Title: Priority: Estimate: **User Story:** As a [description of user], I want [functionality] so that [benefit]. Acceptance Criteria: Given [how things begin] When [action taken] Then [outcome of taking action]



#### User Story for Account Balance Checking

**User Story** 

As a regular fintech app user, I want to check the current balance of my bank account using the fintech mobile app, so that I can regularly review and give updates to my account.

Acceptance Criteria

- · User can login to the mobile app.
- · Users can access their account and see their current bank balance.



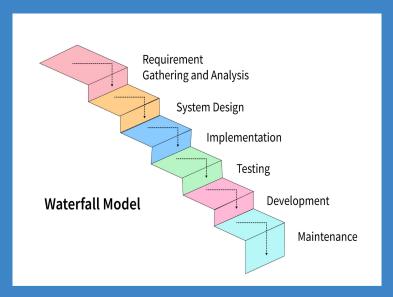
#### Teamwork - 03

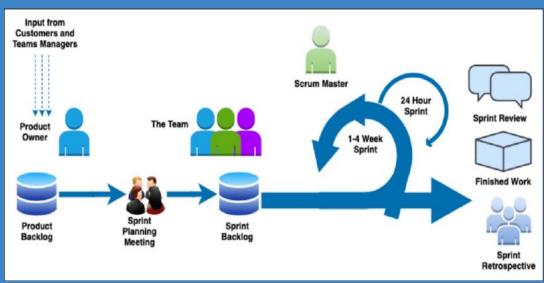


Write down some user stories for your mentioned system



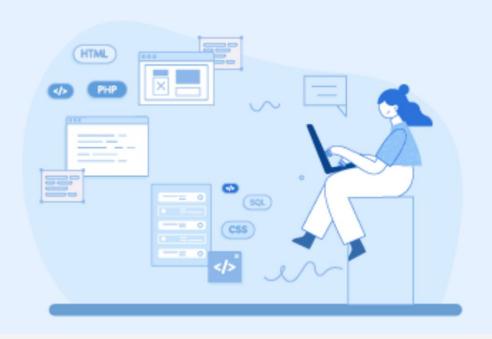
#### Software Development Life Cycle (SDLC)





Waterfall Agile

#### What is Software Development?



What is

## Software Development?

A process of designing, building, and maintaining software applications.

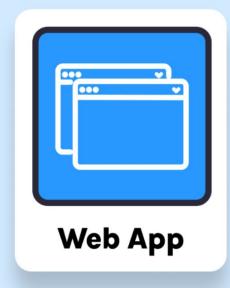


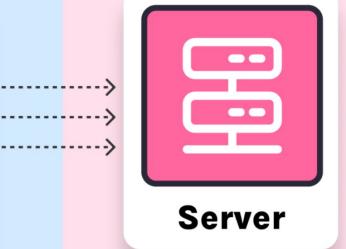




#### **Frontend**

#### **Backend**



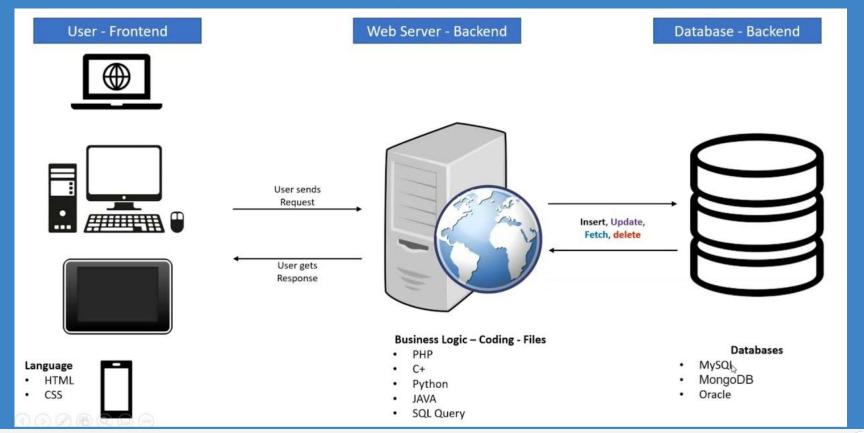








#### Software Design & Architecture?









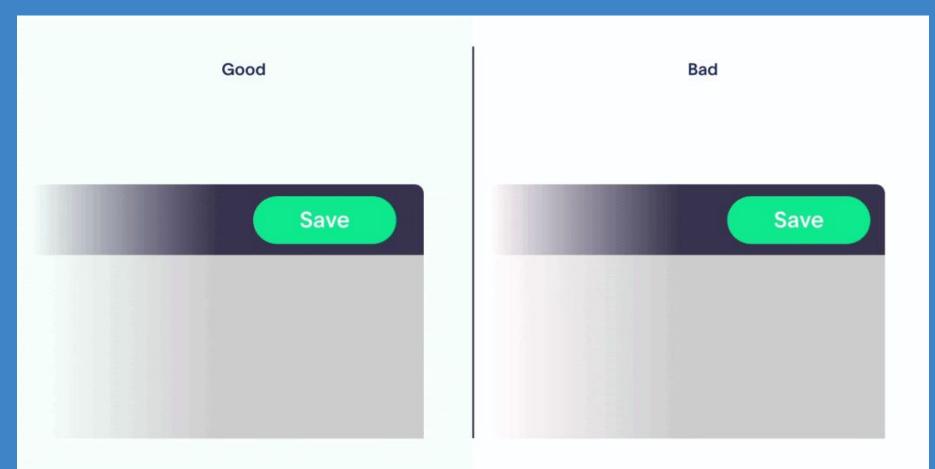
Teamwork - 03

Building a Simple Weather App

Create a simple weather application that retrieves weather information for a given location. The application will utilize an API to fetch real-time weather data and display it to the user. This project will help you practice working with APIs, handling JSON data, and basic error handling.



#### UI & UX



Al might not take your job, but people using Al will

#### Learn Al

Use Al

Invest at least 10% time

### Thank you.