

Presentation Script:

> Assalamu Alaikum everyone, I am Kawsar Ahemmed Bappy. I have recently completed my Internship at Vivasoft Ltd.

With your permission, I want to present an overview of my Internship activities during the last 6-month period.

Firstly, I would like to take a moment and introduce my company to you

- It was founded in 2016
- Co-founders Tarek and Asif were proven industry experts

Fast forward to twenty-twenty-three; it is now

- One of the fastest-growing tech startups in Bangladesh
- Well known for its healthy work environment

While having the motto **Let's build our future together,**

Page 4, Internship plan

Now, coming to the main point, Vivasoft already has a well-decorated internship plan for its interns.

- providing with courses, roadmaps, and bootcamps
- assigning dedicated mentors
- All of that indicates a healthy learning environment

Page 5, starting the journey

I started my journey on Klikit's backend team, where I was guided by two mentors and focused on GoLang as a backend language while also learning core concepts of backend.

Page 6, two phases

My overall internship experience can be divided into two phases:

initial learning phase,

- Where I contributed to a Bootcamp
- Completed some demo projects
- Explored some message queue technologies

And the second one is the live project involvement phase.

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While writing the bootcamp

- I acknowledged the power of documentation and open-source culture
- wrote some chapters, covering vital concepts of Golang such as goroutines, channels, and error handling

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My first demo project, Librario, was a bookstore application

- I created the APIs following the REST architectural style
- Followed Repository pattern as a part of Clean architecture
- Did data validation and proper error handling

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The second demo project, e-shopify, is a backend for an e-commerce site

Carrying the basics from the last project

- I used the echo framework for better performance
- Implemented user authentication using jwt tokens
- Used Redis as a caching mechanism
- Lastly, dockerized the application

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I was also given the task of exploring, famous message queues such as Kafka and RabbitMQ.

- I then learned about the core concepts and functionalities of message queues
- Did some proof-of-concept projects in Golang
- Discovered how it is ensuring fault-tolerant systems, helping to decouple the microservices, and managing asynchronous communication

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The live project in which I was involved during the second phase of my internship was an inventory tracking management system named Pi-Inventory. It was designed as a service for another sass, Financify, following the microservice architecture. But it was designed in a modular way because it has the potential to be a standalone product itself

Elaborate the features

Because the product is in the development stage, I can't share it in detail

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Fortunately, I was a part of the project from the very first step of requirement gathering and analysis, so

- I contributed to the database design
- Developed the restful APIs using the Gin framework
- Used Redis and pagination to improve API performance
- Collaborated with SQA and Frontend teams to identify and resolve bugs.
- refactored codebase for API integration with Financify
- participated in weekly and daily scrums

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Elaborate on the tools and technologies

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These are Some pictures of the frontend

Due to confidentiality and NDA restrictions, specific project visuals, structures, and diagrams cannot be shared

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While communicating with other developers, I gained insights from different projects like GPS trackers, CRUD generators, etc

I willingly tried to understand their

- Project structure
- Architecture
- Control-flow
- Load-balancing mechanisms
- API-gateway

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I also became a DevOps enthusiast during this time.

Dived into the world of DevOps and cloud services

I learned some basics and got an overview of how things work in this domain.

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Elaborate on the technologies I used

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While gaining technical knowledge, I also gained some valuable non-technical skills.

But Most importantly, the question “How is this working under the hood?” drives me now

Finally, my internship with Vivasoft has been an extremely beneficial experience. I'd like to thank everyone at the company for their help and advice.

Thank you.