

# Software Engineering in the Fintech Industry (Malaysia)



# Introduction & Background

A sophomore majoring in Economics and Computer Science, I explored the extent to which the nexus between these two fields transformed the FinTech industry through my summer virtual learning project. Having spent 9 weeks at a leading FinTech startup in Malaysia—MoneyMatch—as a software engineering intern, I gained invaluable skills and insights into how new digital solutions to the challenges faced by the financial services industry are built through software engineering.

### About MoneyMatch

MoneyMatch is a multinational financial technology firm focusing on international payments. The company optimizes treasury operations with machine learning algorithms and blockchain solutions, and they are currently one of the most successful FinTech companies in Malaysia, having processed more than MYR 1 billion transactions. The company is also one of the first companies in Malaysia to integrate the *e-KYC* (electronic know-your-customer) as part of the customer onboarding process.

# **Experience** (Highlights)

# 1. API (Application Programming Interface) Integration

- Worked independently on SOAP API integration for a new payout partner
- Learned about compatibility issues faced by tech companies that adopt different platforms

# 2. Backend Development with SQL

• Hands-on application of core Computer Science concepts such as runtime and space complexities in data queries

### 3. Software Engineering Practices in the Industry

- The trade-off between technical debt and development speed
- Basic software architecture

### 4. The Startup Culture

- Agile software development framework
- Challenges + Opportunities for technological disruption

# Kathrin in Germany wants to send money to John in the UK. She sends her Euros to TransferWise's German account. Step ② TransferWise automatically matches her euro-to-pound transaction with other users who want to send money in the opposite direction. It crowdsources other users' pounds to assign to John. Other users

# Key Takeaways

### **General:**

- Better understanding of basic software architecture and web design
- Application of CS/ software engineering in the FinTech industry

### **Technical:**

- Backend (i.e.database schema design)
- Tech Stack:
  - o Laravel (PHP)
  - o React / Vue.is
  - o Bootstrap
  - HTML, CSS, Javascript









Image credit: TransferWise