

Industrial Attachment



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Contents

- Objective
- Introduction
- Motivation
- Required Technology
- Description
- Results
- Conclusion
- Future Work



Introduction: About Selise

- **Swiss-owned** software firm specializing in consumer-centric cloud and mobile solutions across diverse industries.
- **Global presence** with offices spread across **6 nations** - Switzerland, Germany, UAE, Bangladesh, Bhutan, and Kosovo.
- Innovative approach, **flexible work culture**, and talent development commitment.
- Leader in delivering **cutting-edge technological** solutions and fostering a dynamic work environment.



Strategic Organizational Framework

- Started as a singular entity; now with **500+ employees**.
- **13 distinct departments** functioning independently, fostering a **startup-like culture**.
- "**Product Lab**" for internal technology and product development shared across departments.
- Open workspace and meeting rooms, adaptable to departmental needs.
- Unique **resource-sharing system** optimizes human capital.
- Dedicated HR team ensures harmony and effective problem-solving.



Guiding Philosophy

- Active listening, insightful questioning, thorough analysis, and collaborative co-creation.
- Enduring partnerships built on active engagement and unwavering commitment.
- Upholding **Swiss quality standards** – precision and excellence.



Core Values

- **Embracing Swissness:** Precision, reliability, and quality in every project.
- **Customer-Centric Approach:** Tailored solutions aligning with unique client requirements.
- **Creating Value:** Transforming challenges into opportunities for sustainable growth.
- **Embracing Diversity:** Celebrating diverse perspectives for innovation and problem-solving.
- **Continuously Moving Forward:** Staying at the forefront of technological advancements.



Services by SELISE Digital Platform

- Provides **comprehensive solutions** for business empowerment
- Empowers clients for competitive edge



Strategy Consulting: Tailored strategies driving resilience and sustainable growth

The diagram illustrates a business strategy framework. At the center is a cloud labeled "Business Strategy". To the left, a hand-drawn structure shows "Function" (with "Tech" and "Product & Service" sub-points), "Marketing", and "Customer". Arrows indicate a flow from Function to Marketing to Customer. Below Function is "ERP". To the right of Marketing is "Social Media" and "SOLD". Below Customer is "CRM" and "Customers". A hand is shown drawing the diagram, with a small 3D cube and other icons visible on the left side of the chalkboard.



Services by SELISE Digital Platform (Cont.)

Process Engineering: Automation and digitization for enhanced efficiency



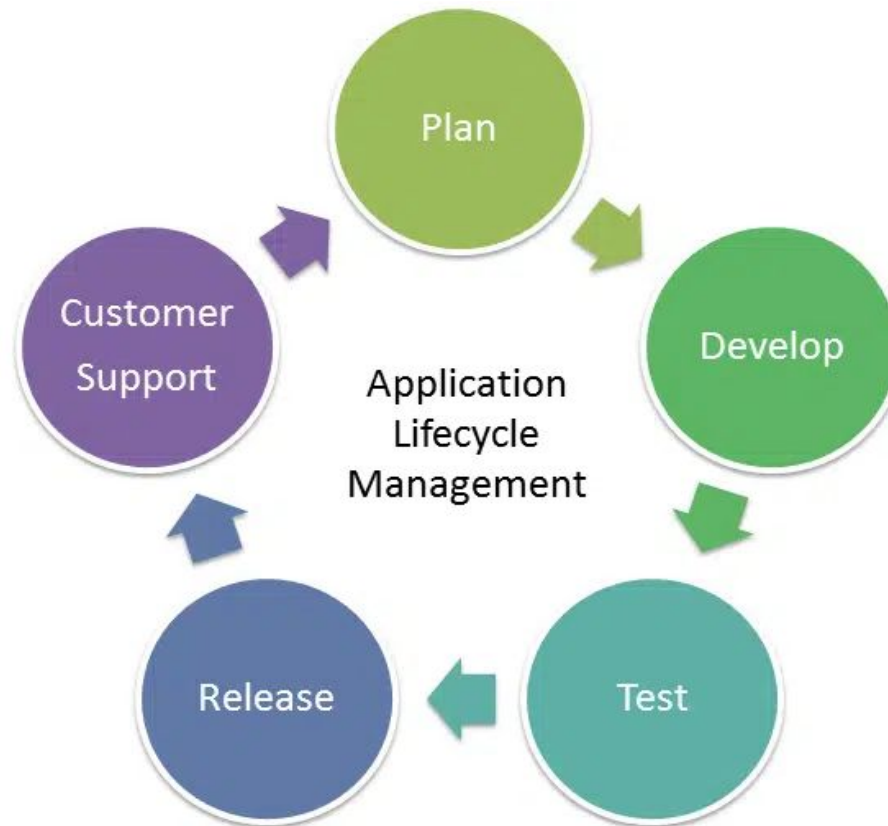
Services by SELISE Digital Platform (Cont.)

Platform Development: Customized solutions optimizing business processes



Services by SELISE Digital Platform (Cont.)

Application Management: Round-the-clock support for seamless software experience



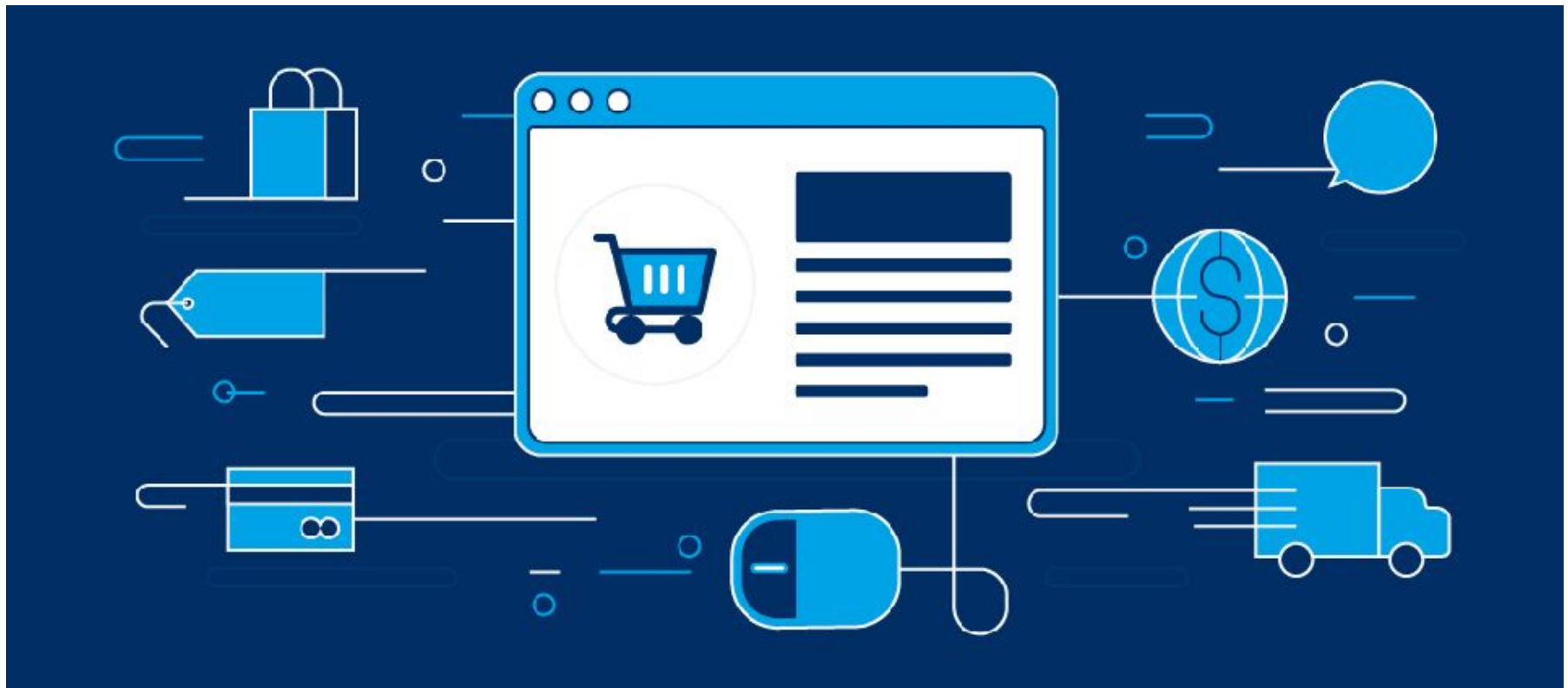
Technology Expertise

- Highly skilled and knowledgeable in all key technologies, including FinTech, IoT, telecom, etc
- More than **11 years** of experience in the IT industry



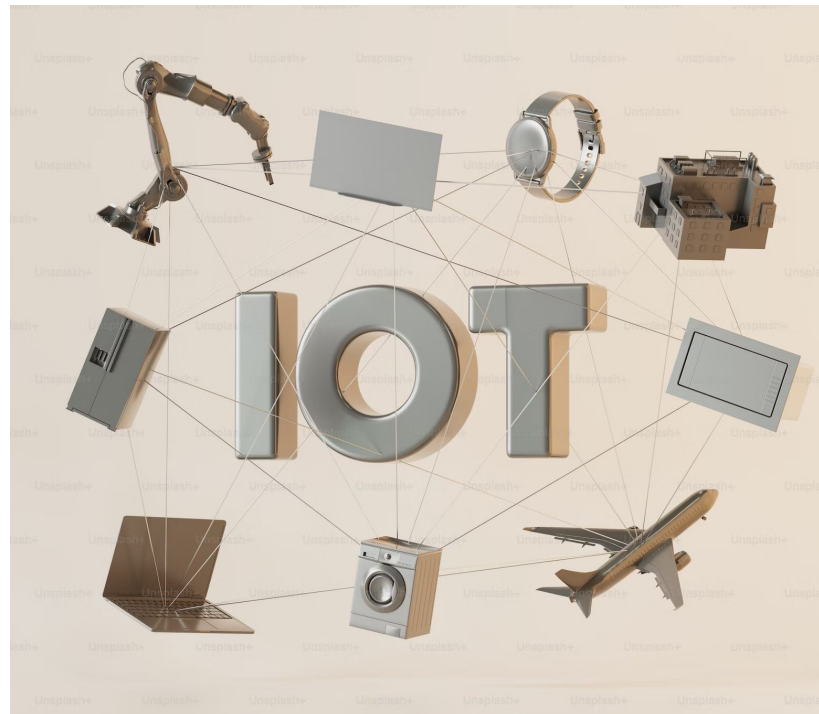
Technology Expertise (Cont.)

Ecommerce: Seamless online shopping experiences for thriving digital marketplaces



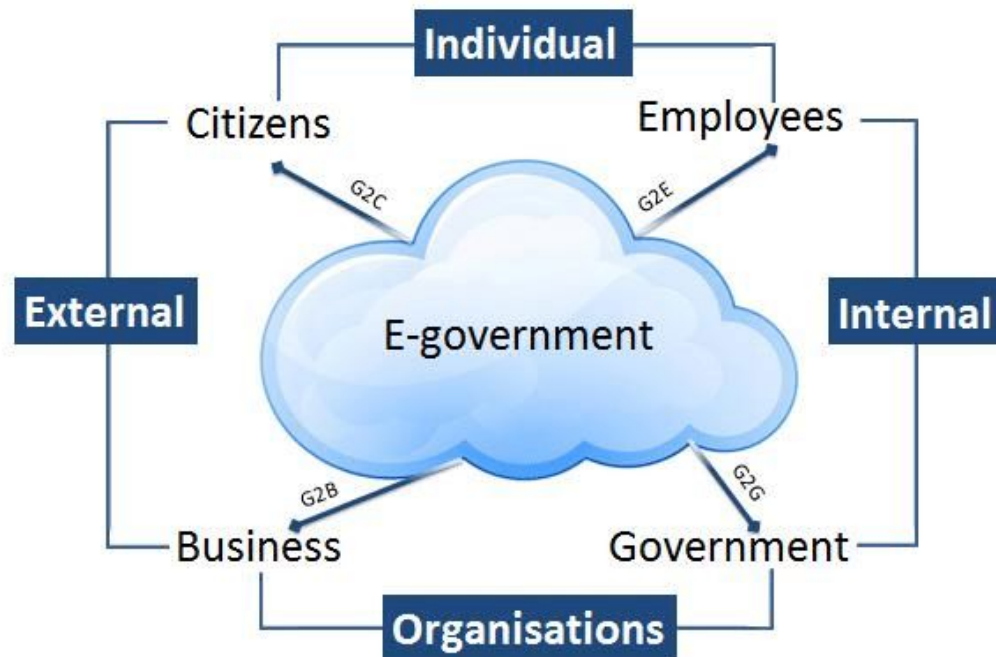
Technology Expertise (Cont.)

Internet of Things (IoT): Leverages IoT technology, connecting devices and systems to enhance efficiency, convenience, and data driven decision-making.



Technology Expertise (Cont.)

EGovernment: Contributes to the evolution of public services, employing technology to enhance accessibility, transparency, and citizen engagement within government initiatives.



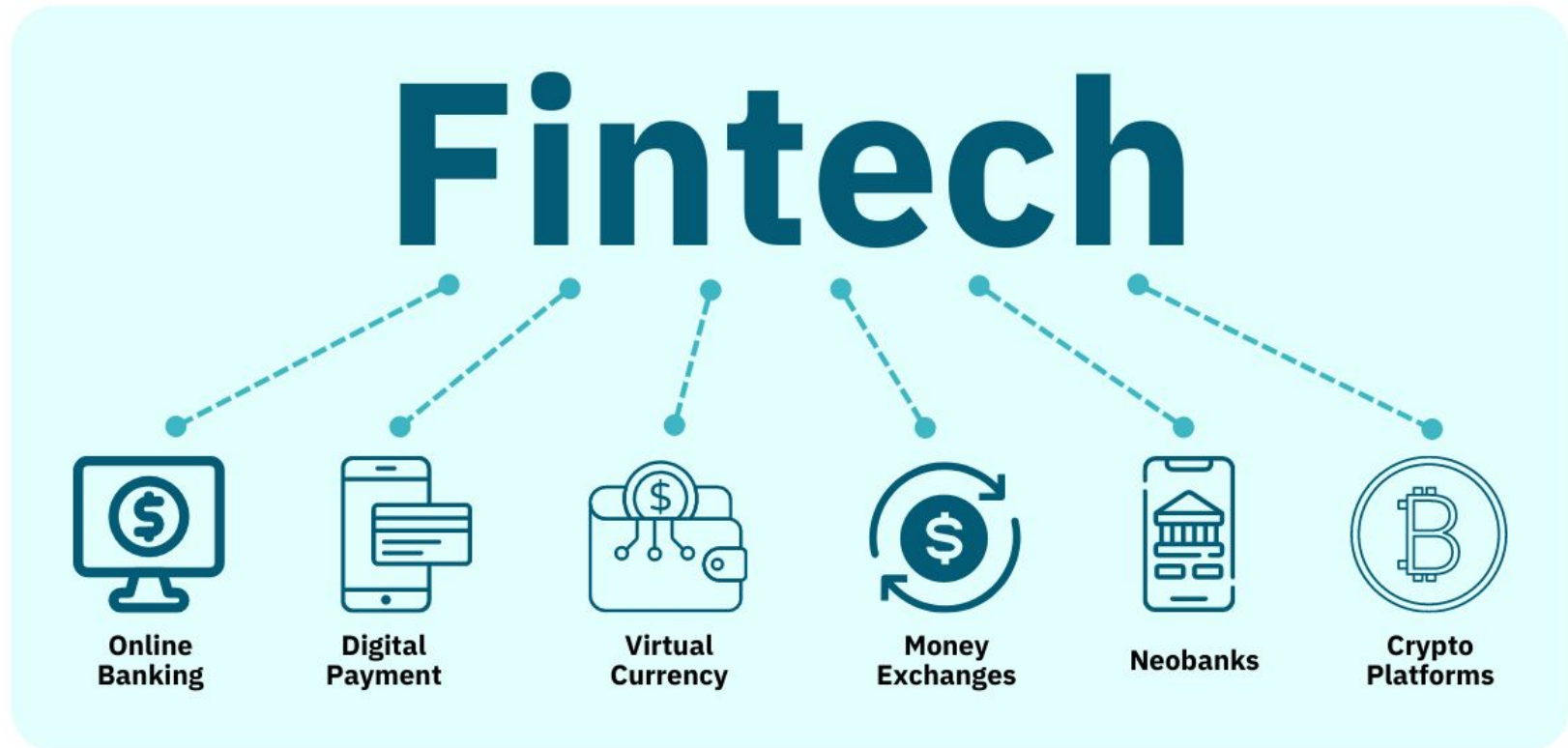
Technology Expertise

Telecom: Navigates the complex landscape of telecommunications, providing innovative solutions that facilitate seamless communication and connectivity.



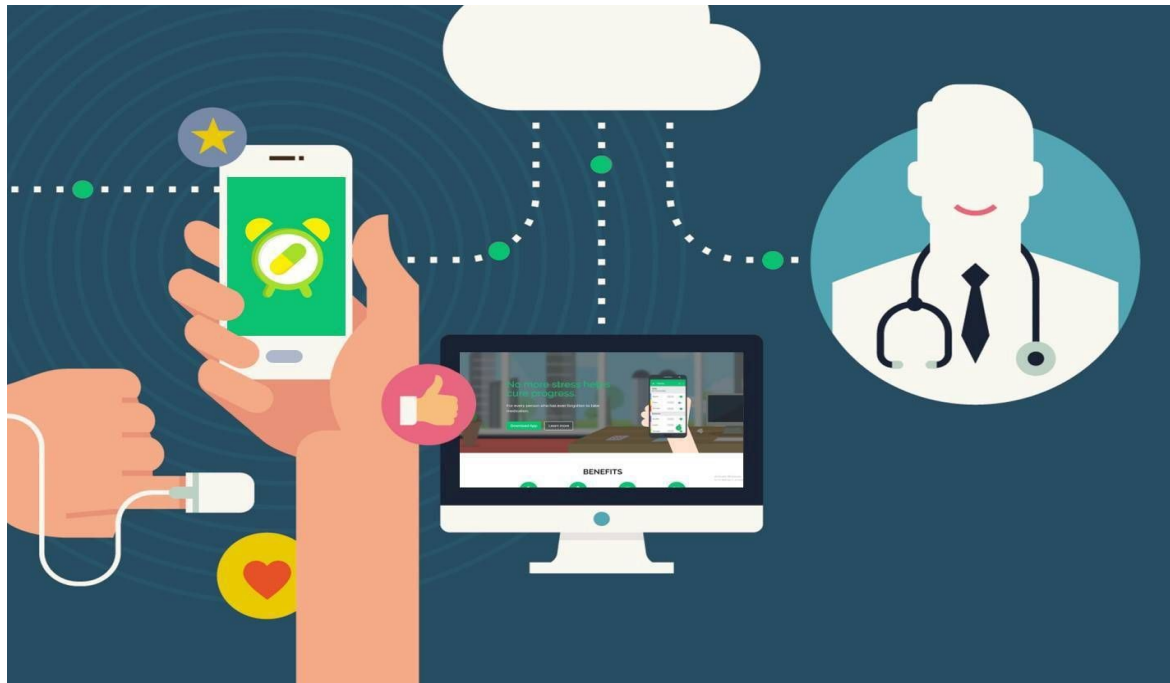
Technology Expertise (Cont.)

FinTech: Offers cutting edge solutions that revolutionize banking, payments, and financial services.



Technology Expertise (Cont.)

Healthcare: Utilizes technology to improve healthcare delivery, ensuring better patient outcomes, streamlined processes, and data security



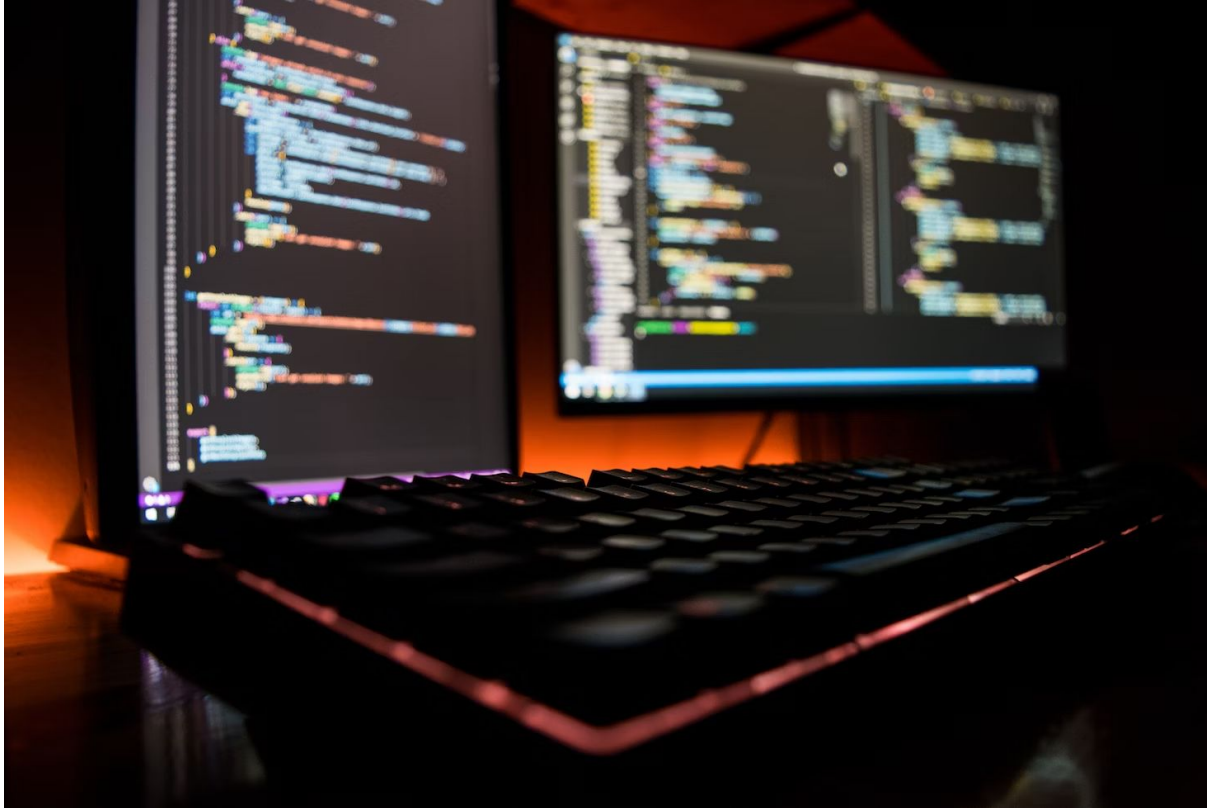
Technology Expertise (Cont.)

Logistics: Optimizes supply chain management through technology, enhancing logistics operations, inventory control, and overall efficiency



Technology Expertise (Cont.)

Web Design: Creates visually appealing and user friendly websites



Technology Expertise (Cont.)

Auditing: Utilizes advanced tools and methodologies for auditing, ensuring accuracy, compliance, and transparency in financial reporting



Selise Agile Software Methodology

Client-Centric Approach:

- ❑ Project structuring based on budget and complexity
- ❑ Collaborative feature selection at the start of each block

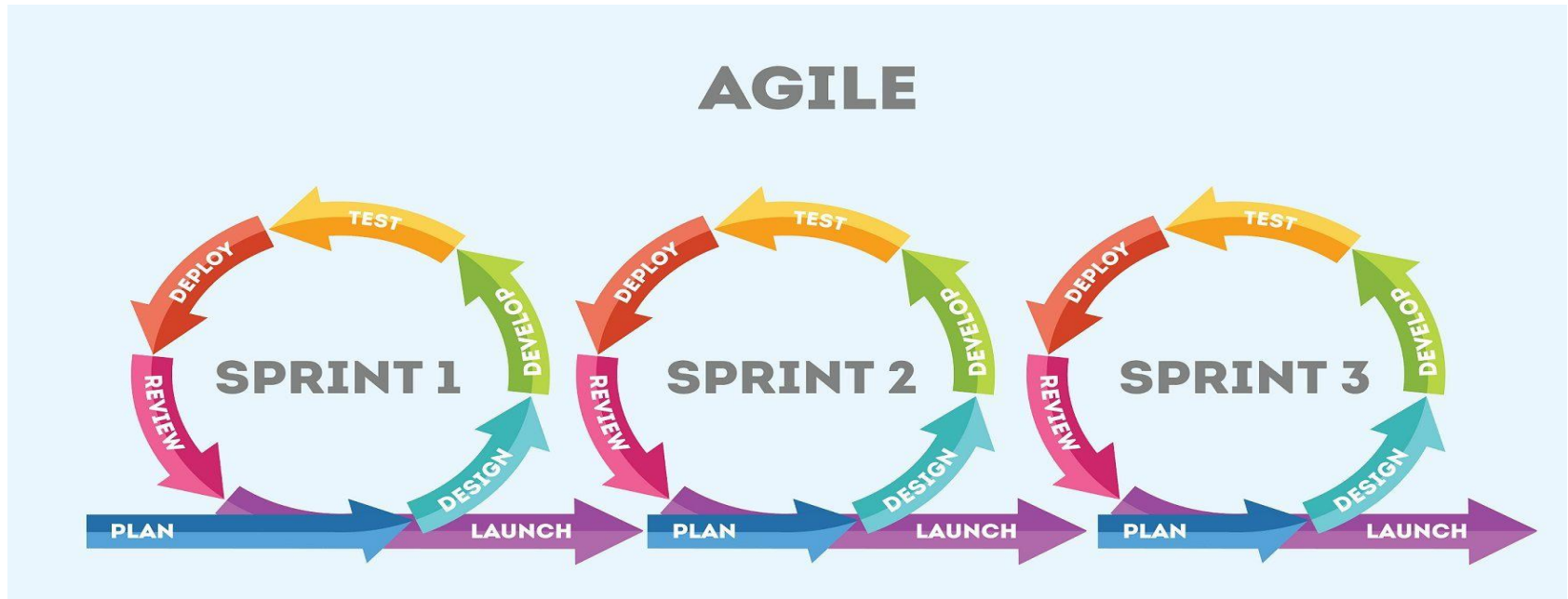


Figure 1: Agile Software Methodology

Sprint Workflow for Success:

- ❑ Sprint duration (5, 7, or 10 days)
- ❑ Task prioritization and team assignment
- ❑ Scrum meetings for updates and feedback



Transparency and Client Partnership:

- ❑ Reserving time for unforeseen challenges
- ❑ Work preview presentations to the client
- ❑ Client input shaping project direction



Products Launched by Selise

Major Product-1:

Samsung Kiosk

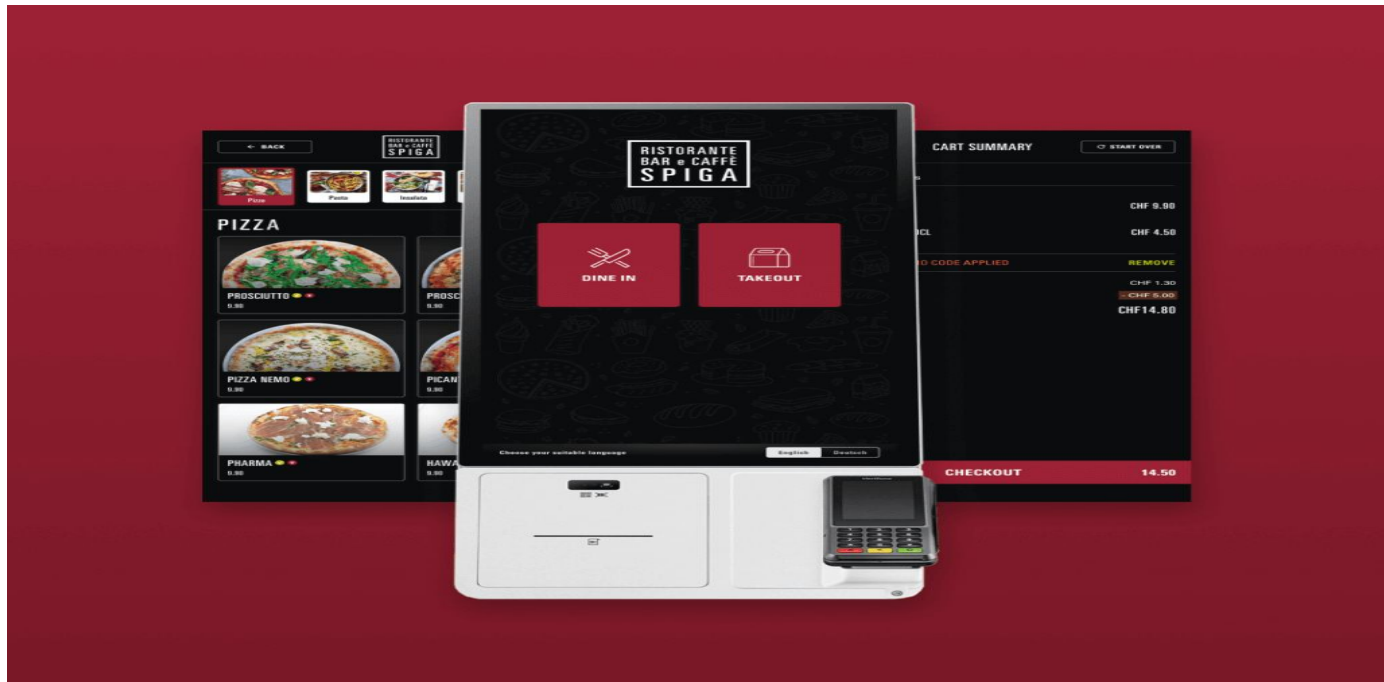


Figure-2:Samsung Kiosk.



Products Launched by Selise (Cont.)

- ❑ Major Product-2:
 - ❑ Selise E-Signature



Figure-3:Selise E-Signature

Products Launched by Selise (Cont.)

❑ Major Product-3:

- ❑ Data Collection and Auditing tool for the German Railway Organization.



Figure-4: Auditing Tool

Products Launched by Selise (Cont.)

- Major Product-4:
 - Page Builder



Figure-5: Page Builder

Git & GitHub

- Distributed version control system
- Clone project, control and track changes
- Commit, pull and push project
- GitHub is the largest host of source code
- Repositories, Branches, Commits, Pull request



HTML, CSS, JavaScript

- HTML Markup language
- Creating and Structuring content of WWW
- Tags and Elements
- CSS control the presentation and layout of web pages
- define the visual aspects of a webpage
- JavaScript making webpage interactive and dynamic
- Executed in the user's web browser
- Responsive web experiences



TypeScript

- Extends the capabilities of JavaScript
- Adds static typing to JavaScript
- One of a kind of Compiler
- Check compile time errors



Angular

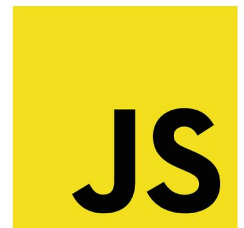
- JavaScript-Based web framework
- Powerful Front-End Development
- Two-Way Data Binding
- Powerful Dependency Injection
- Single Page Applications



ExpressJS

- Minimalistic Design
- Middleware Support
- Routing Capabilities
- HTTP Utilities
- Scalability
- Quick Server Development

Express



POSTMAN

- API Request Creation
- Automated Testing
- Collaboration Features
- API Documentation
- Scripting Capabilities
- Integration Support



POSTMAN



MongoDB

- Flexible Document Data Model
- Schemaless
- Scalability
- Replication and High Availability
- Geospatial Data Support
- Wide Range of Use Cases



Building a Basic Calculator

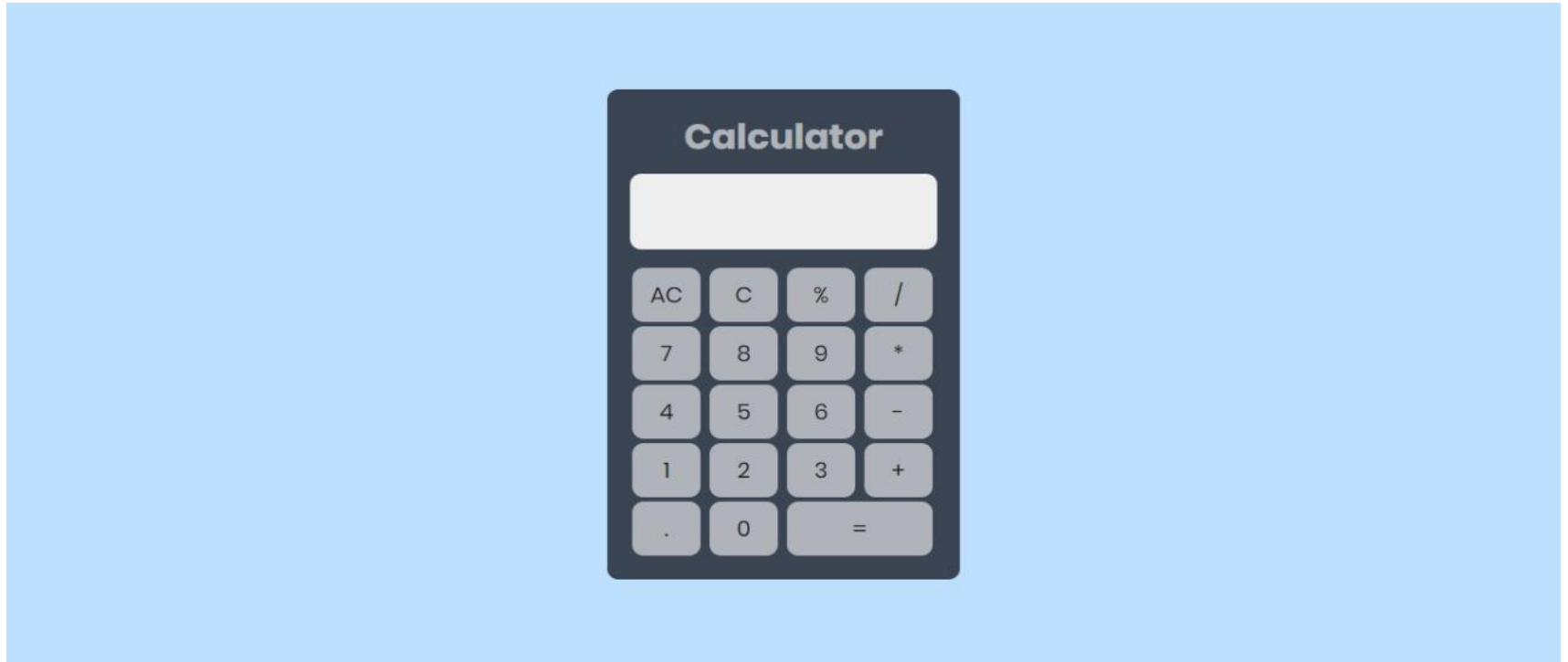


Figure 6: Basic calculator app having no value

Building a Basic Calculator (Cont.)

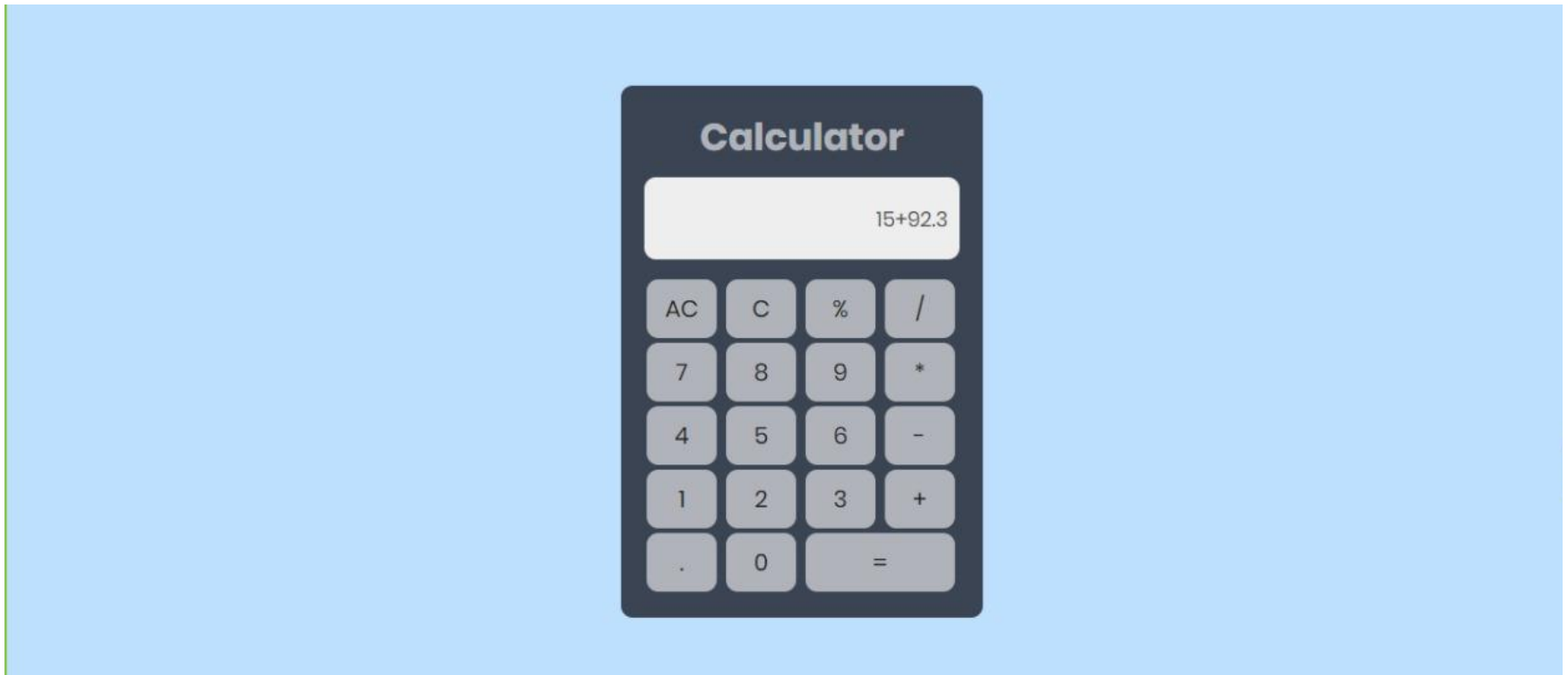


Figure 7: Basic calculator app performing operations.

Building a Basic Calculator (Cont.)

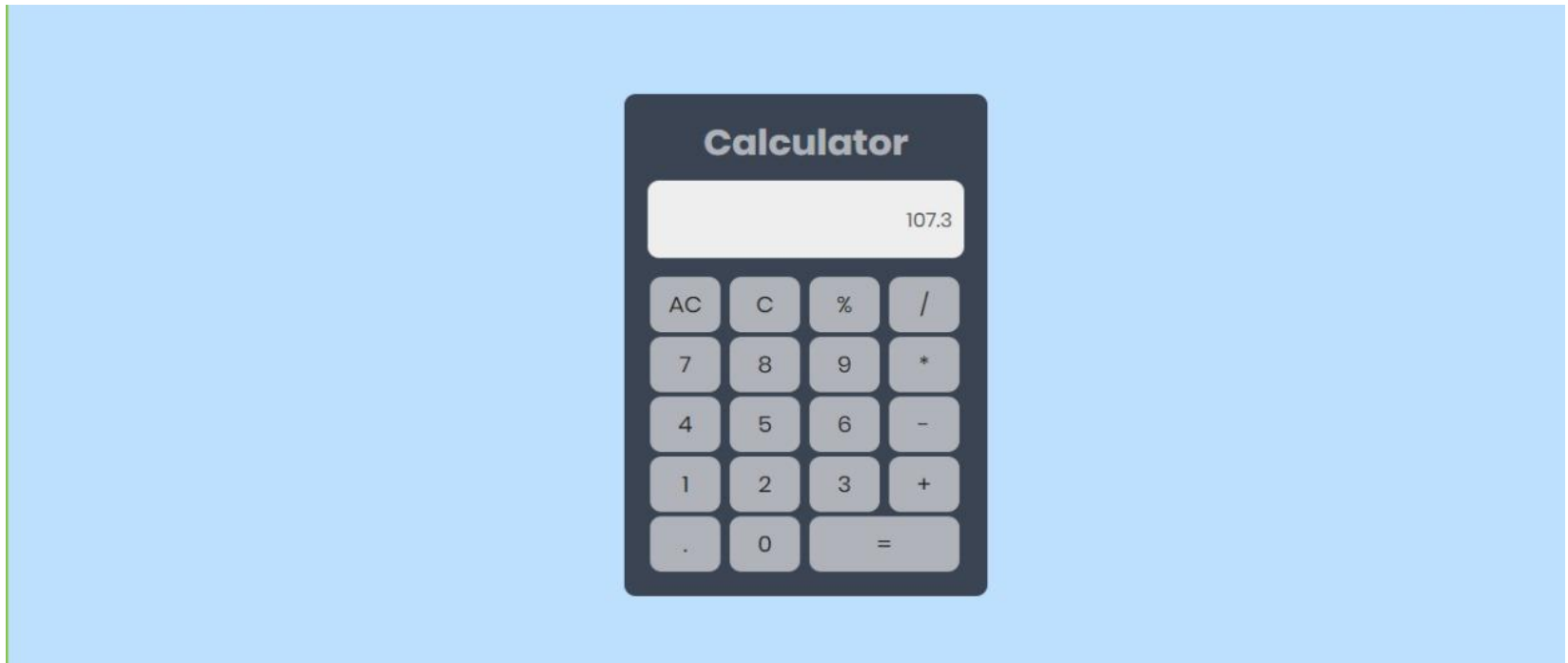


Figure 8: Basic calculator app having result

Dynamic Form Creation

Project Description:

Creation of a dynamic form using Angular, a popular front-end framework.

Purpose:

Gain practical experience in building and utilizing forms with Angular.

Utilization of ngModel for data capture.

Implementation of a dynamic form to enhance the user experience.



Dynamic Form Creation (Cont.)

Implementation:

- Created a dedicated component for form development.
- Captured data using ngModel.
- Gathered First Name, Last Name, and dynamic "Add Skill" option.
- Relayed data to the Resume component via a service.
- Enhanced user experience with a dynamic form.
- Demonstrated Angular's data collection and representation capabilities.



Dynamic Form Creation (Cont.)

Resume Builder

First Name:

Last Name:

Skills

+ Add another Skills

Submit

Refresh

Figure 9: Dynamic form homepage



Dynamic Form Creation (Cont.)

Skills

+ Add another Skills

Data Structure

X

Algorithm

X

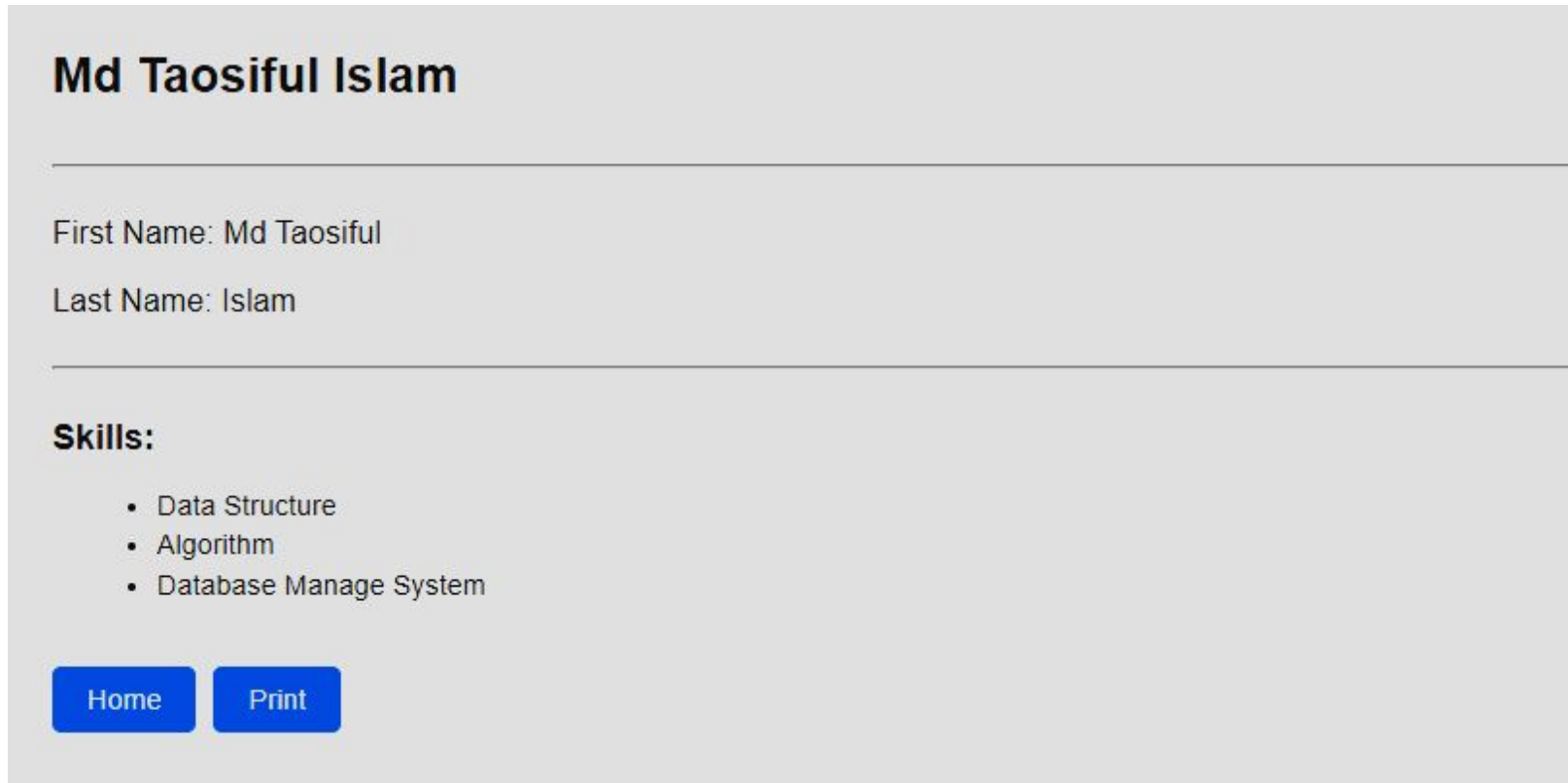
Database Manage System

X

Submit

Figure 11: 'Add skill' functionality

Dynamic Form Creation (Cont.)



Md Taosif Islam

First Name: Md Taosif
Last Name: Islam

Skills:

- Data Structure
- Algorithm
- Database Manage System

[Home](#) [Print](#)

Figure 12: Form information display

Showing API data to a frontend

Project Description:

- Create an Angular web application
- Fetch data from a public API (Game of Thrones quotes)
- "Refresh" button for random quotes

Purpose:

- Evaluate API integration skills
- Assess UI/UX design and creativity
- Test responsive user interaction



Showing API data to a frontend (Cont.)

Implementation:

- Angular application development
- Custom medieval-themed styling
- API calls with Angular HTTP client
- Error handling
- Dynamic updates with the "Refresh" button



Showing API data to a frontend (Cont.)

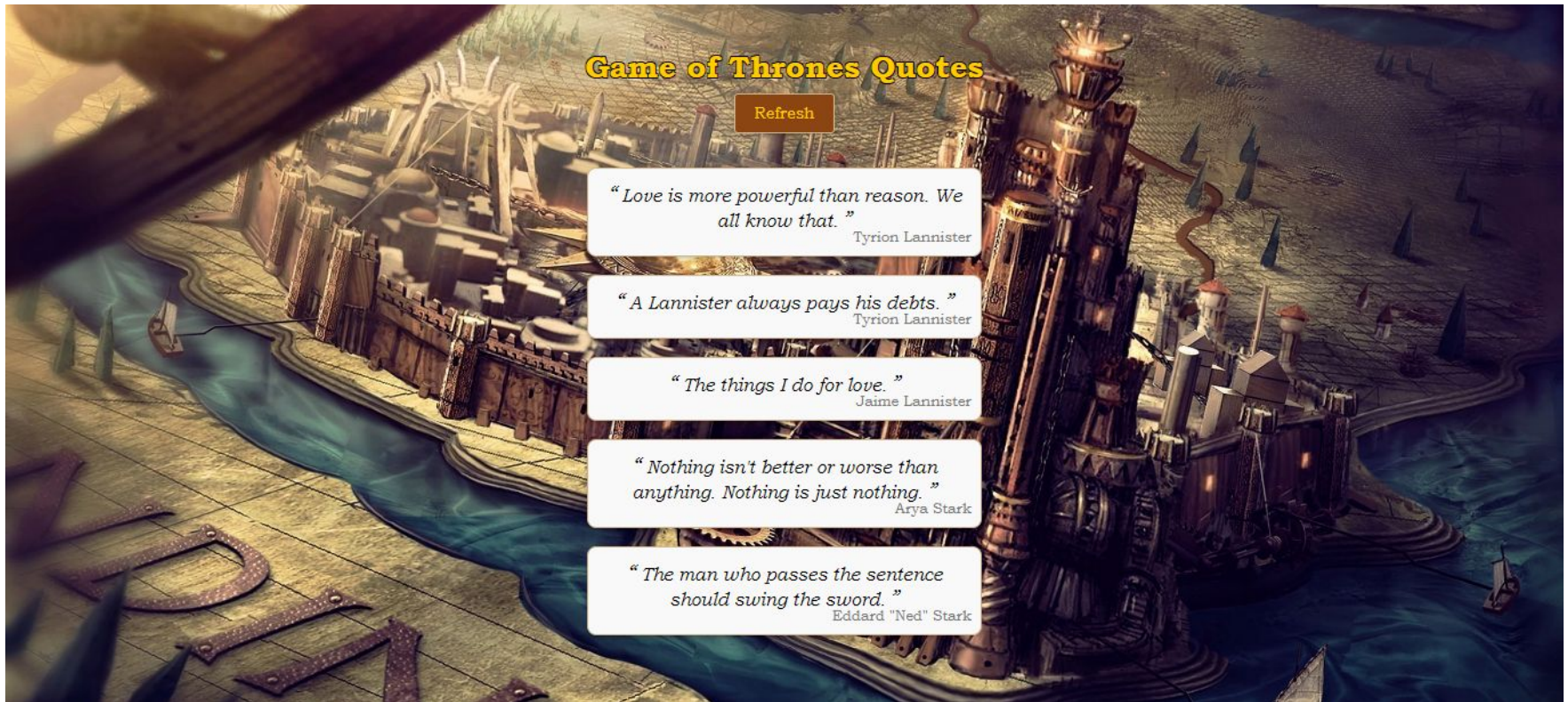


Figure 13: Showing API data to frontend

RESTful API Creation (Cont.)

Project Description:

Created an Express.js API endpoint, integrated it with the frontend, and conducted thorough Postman testing.

Purpose:

Developed a custom RESTful API with Express.js, integrated with MongoDB, and emphasized HTTP method implementation and testing.

Implementation Details:

Crafted a custom REST API using Express and MongoDB, rigorously tested HTTP methods with Postman, established a structured schema, and enabled data insertion and retrieval.



RESTful API Creation (Cont.)

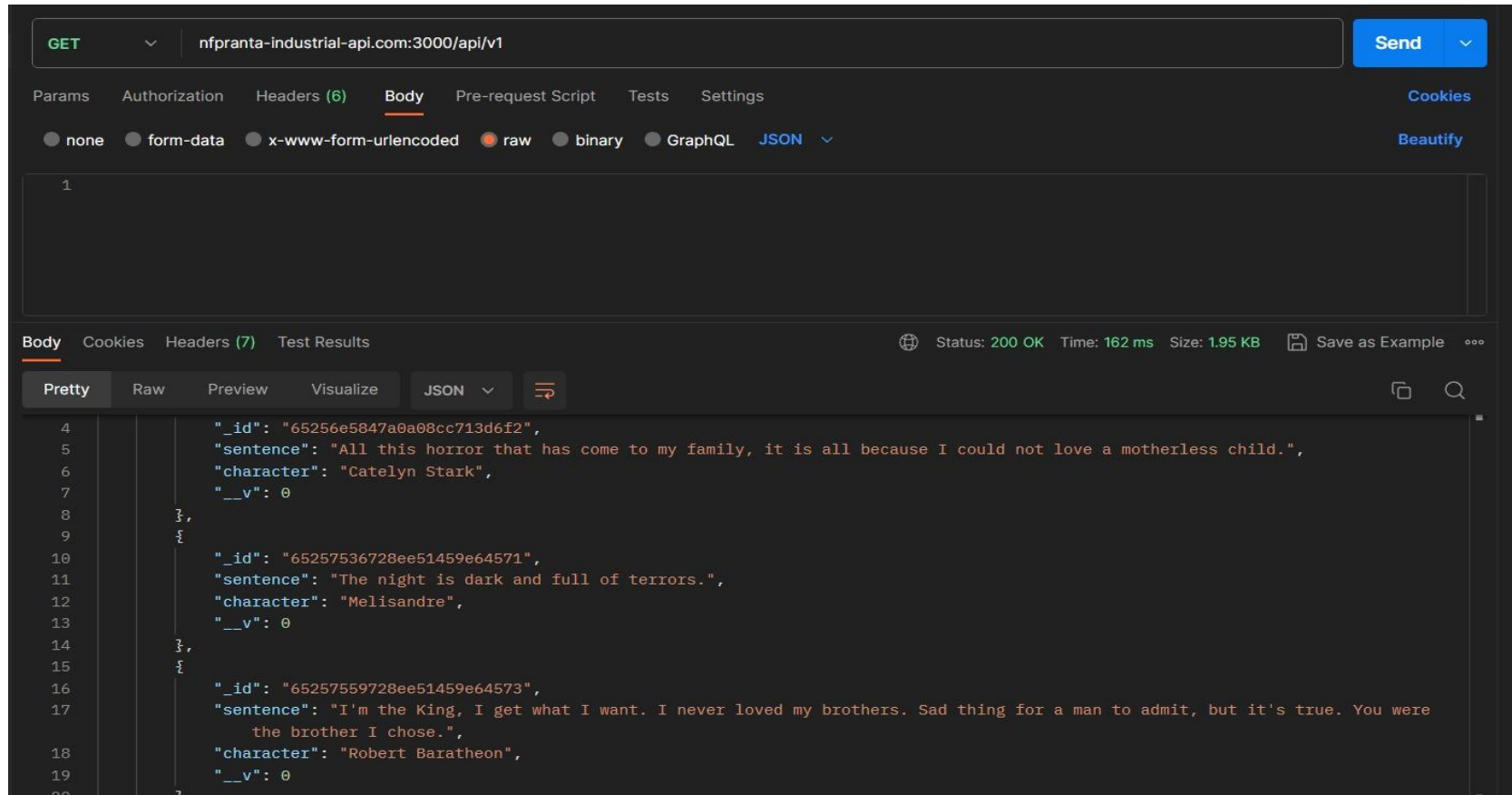


Figure 14: GET Method extracting all quotes



RESTful API Creation (Cont.)

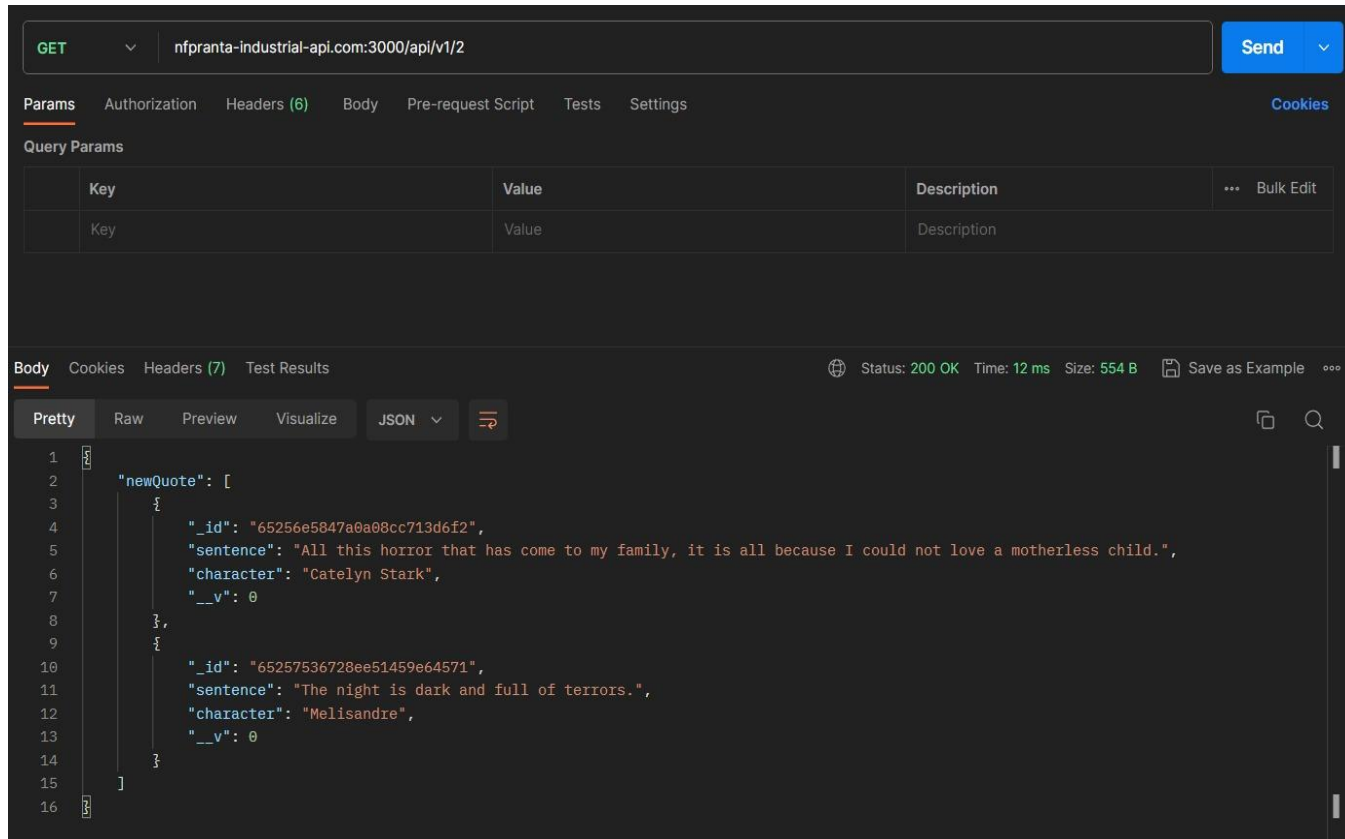


Figure 15: GET Method extracting a fixed number of quotes

RESTful API

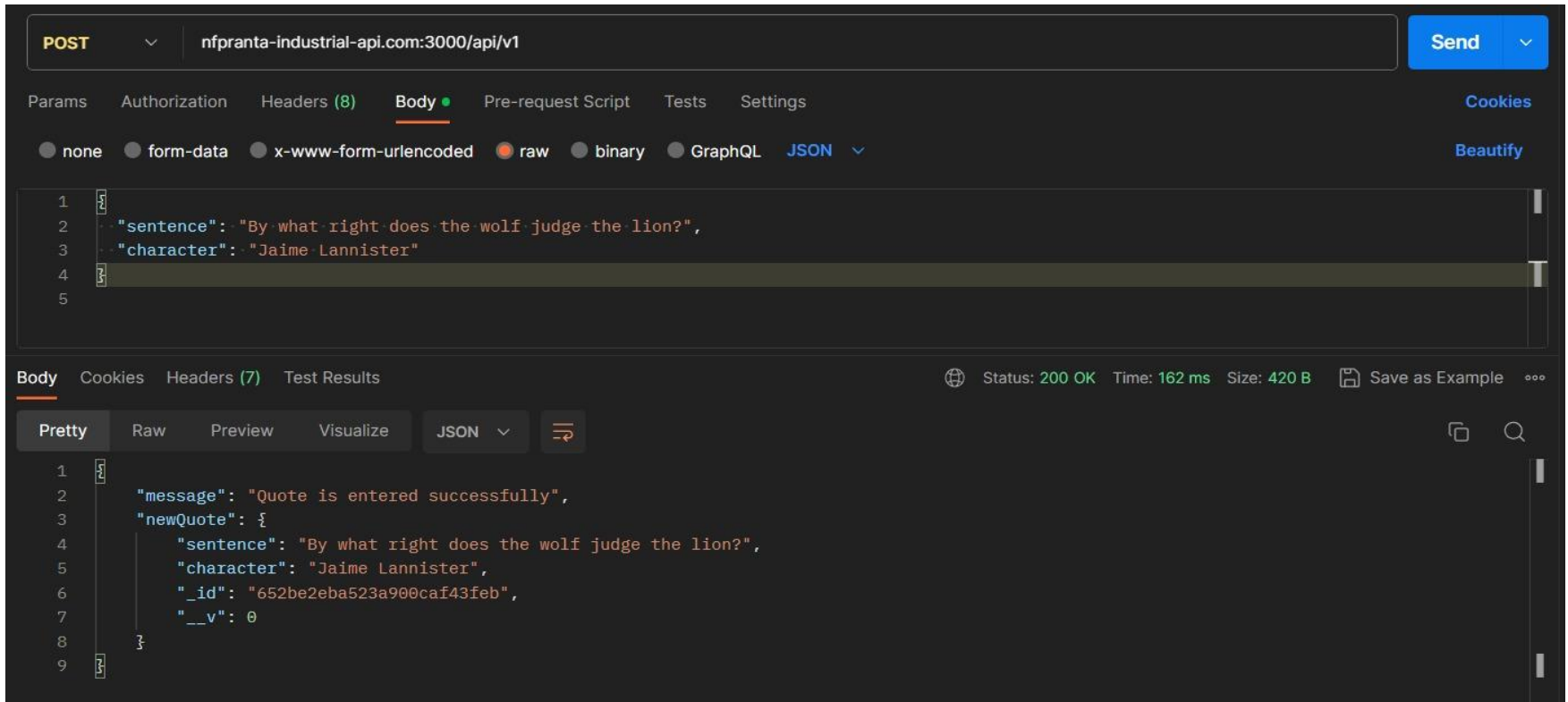


Figure 16: RESTful API

Conclusion

- Had a fundamental understanding of software industries and technology trends
- Had a fundamental understanding of requirement understanding, software life cycle
- Learned how to collaborate with teammates while developing a project



Conclusion (Cont.)

- Learned several new tools and framework used in software industry
- Finally, the industrial attachment experience will instruct and support us in the future



Thank You

