

Thriving Coders

We digitize your processes, Now





We present our learning project:

**which will empower enterprises through
digitization and process optimization**

Streamlining Business Operations with Effortless Digital Transformation

Many enterprises still struggle with digitizing their management processes, which can hinder efficiency and growth.

Our solution simplifies this transition by offering easy-to-integrate digital tools that streamline and enhance business operations, making the shift to digital management effortless and effective



Solving Digitalization Challenges with Client-Server Architecture

Our client-server architecture allows for centralized data management and handle increased data volume effortlessly



Digital Transformation of Management Processes

By implementing a client-server architecture, we effectively address the challenges of digitalizing management processes

Thriving - Coders Team

Unlike generic solutions, we tailor our client-server architecture to the specific needs of each business, ensuring that our solution addresses the unique challenges and requirements of our clients

Kristina Deriugina

Our project is managed by a full-stack developer skilled in both Java and React

Galina Lasko

Our team includes a backend developer with expertise in both SQL and NoSQL databases

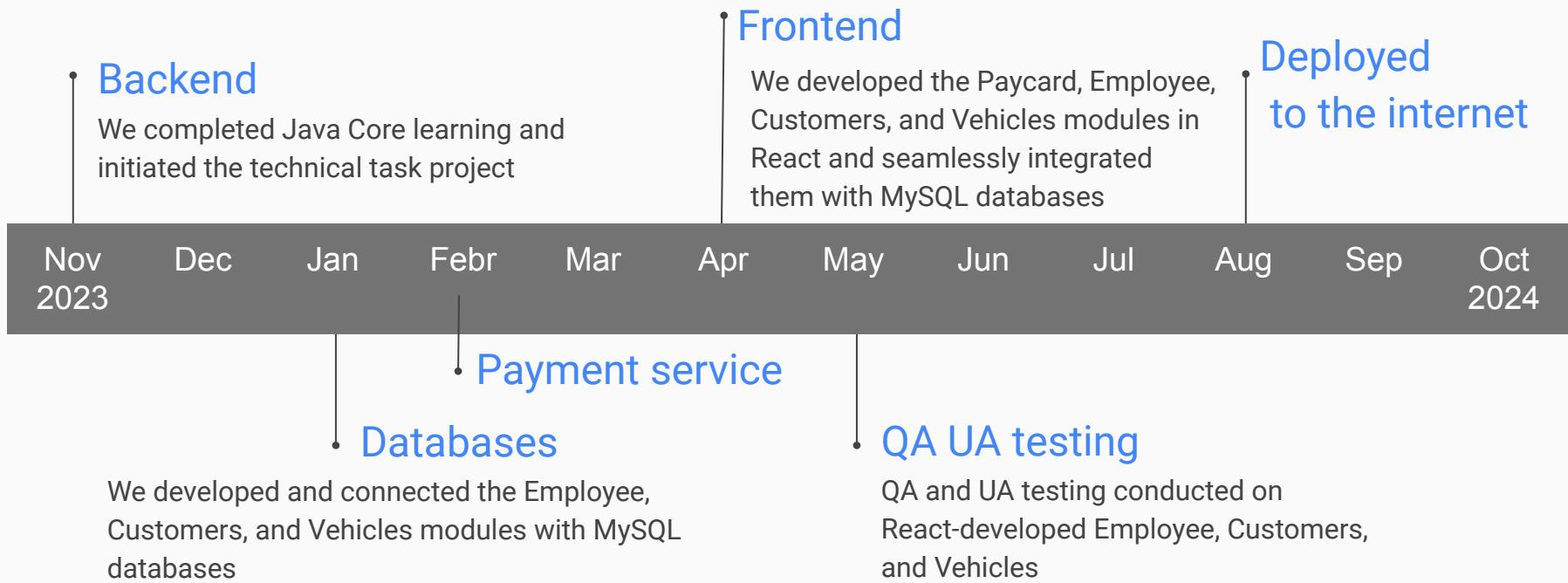
Andrey Naumov

Our team features a frontend developer proficient in React

Olga Mayer

QA Engineer with expertise in backend and frontend development, leverage tools like Postman and Swagger

Project Milestones: Progress Overview



We suggest that our customers explore the following features in our app for managing their enterprise:

- *Real-Time Dashboard: Gain instant insights into key metrics and performance indicators to make informed decisions quickly*
- *Integrated Data Management: Streamline operations with seamless access to employee, vehicle, and other critical data through a centralized platform*
- *Customizable Reports: Generate and customize detailed reports to track progress and identify areas for improvement.*

ManageFlow

How Our Solution Works

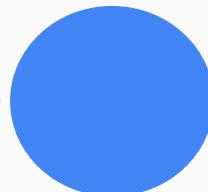
Step 1

Backend: creating a simple API using the Spark framework and managing JPA entities with Hibernate



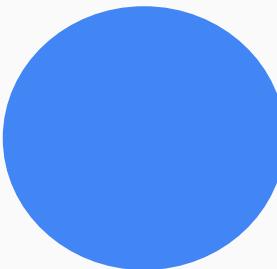
Step 2

Frontend: we customized an open-source React dashboard to fit the requirements of our project



Step 3

Finally, after thorough testing, we deployed our application in a Docker container on the server and connected it to a MongoDB/MySQL cluster in the cloud.



The background of the slide is a dark, atmospheric image of a city skyline at dusk or night. The Empire State Building is prominent in the center, its top illuminated with red, green, and blue lights. Other skyscrapers are visible, their windows glowing with light. The sky is a mix of dark blues and purples, with some lighter, orange and yellow hues near the horizon, suggesting a sunset or sunrise. The overall mood is mysterious and modern.

The full stack technology:
Java Spark + (No) SQL + React

Java Spark

We used the Java Spark Framework because it allows for quick API creation with minimal configuration.

This enabled us to focus on building core features and significantly reduced development time

NoSQL

We are using a MongoDB cluster for its robust scalability and high availability

This ensures our application can efficiently handle large volumes of data while delivering reliable performance

SQL

We are using MySQL (InnoDB engine) in a Cloud Provider (Digital Ocean) environment to securely store employee and vehicle data, with plans to transition the database to the cloud for enhanced accessibility and scalability

We are committed to ensuring the security and confidentiality of our customers' data, implementing rigorous measures to protect against unauthorized access

React

We developed the dashboard using a combination of frameworks and libraries, including React, Next.js, Yup, and Formik, to ensure a robust and responsive user interface

This setup aligns with industry standards for this type of application, providing a seamless and efficient experience for users

Cloud Environment



MySQL



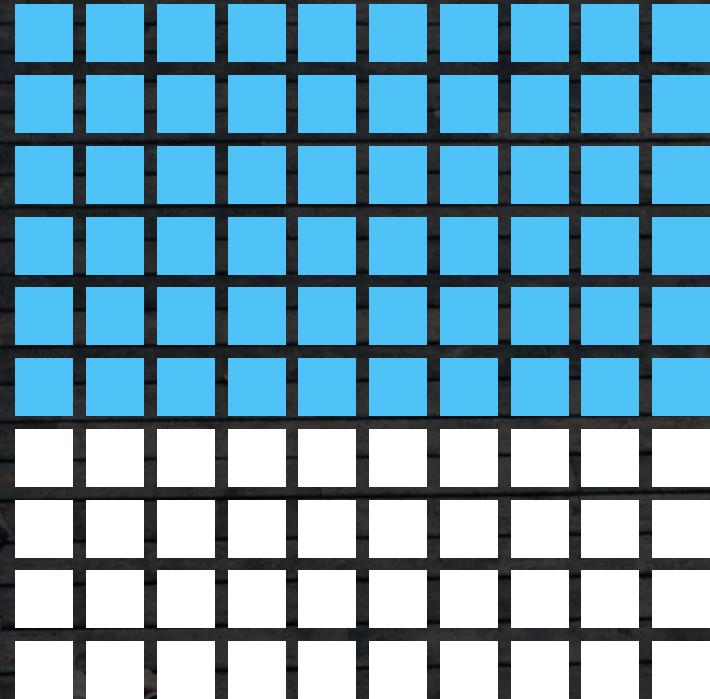
MongoDB

Docker

Backend Server
(API)

Frontend React

**Now is the ideal time to
implement our solution
because businesses
face increasing pressure
to improve efficiency,
scalability, and security**



Project References and Links

- <https://gitlab.com/ait-students/thriving-coders>
first Technical Task (in russian language) with source code for backend
- [andrej-naumov/thriving-coders-frontend \(github.com\)](https://github.com/andrej-naumov/thriving-coders-frontend)
Dashboard Developed with React and Next.js Frameworks
- [DeriuginaKristina/thriving-coders-HomePage \(github.com\)](https://github.com/DeriuginaKristina/thriving-coders-HomePage)
Homepage Developed with HTML, CSS and JS
- [MongoDB Cloud | MongoDB](https://www.mongodb.com/cloud/mongodb)
Here is our database for managing goods
- [MySQL Cloud | DigitalOcean provided by aiven.io](https://www.mysql.com/cloud/digitalocean)
Here is our database for managing goods
- <https://thriving-coders.com>

Thank you for your attention.

We appreciate your time and interest in our presentation.

Please feel free to ask any questions you may have.