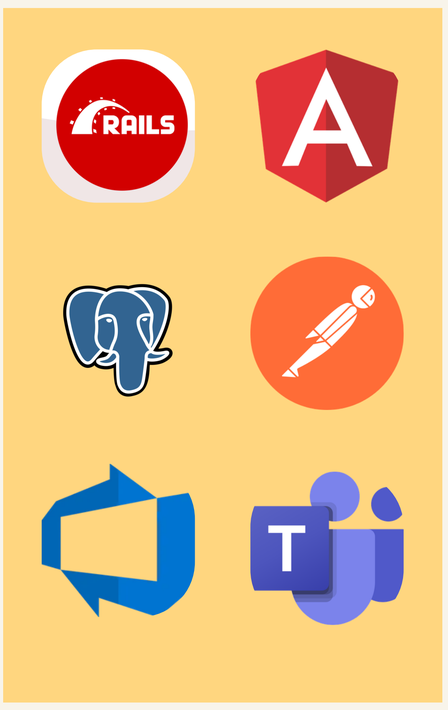
BANANA TALENT VERSION 1.6 : ERP WEB APPLICATION

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ABSTRACT

The Banana Talent Version 1.6 project is a comprehensive enhancement of an internal web application designed to streamline human resource and project management processes. The system serves as a central hub for recording employee lifecycles, tracking project milestones, and generating critical business reports. Developed using the Model-View-Controller (MVC) architecture, the application maintains a clear separation between data logic and user interface, ensuring long-term maintainability. The development was executed via an Agile approach, delivering key features such as project financial dashboards and corporate event timelines. Evaluation results through unit testing confirm that the system successfully improves data accessibility and reduces administrative workload.

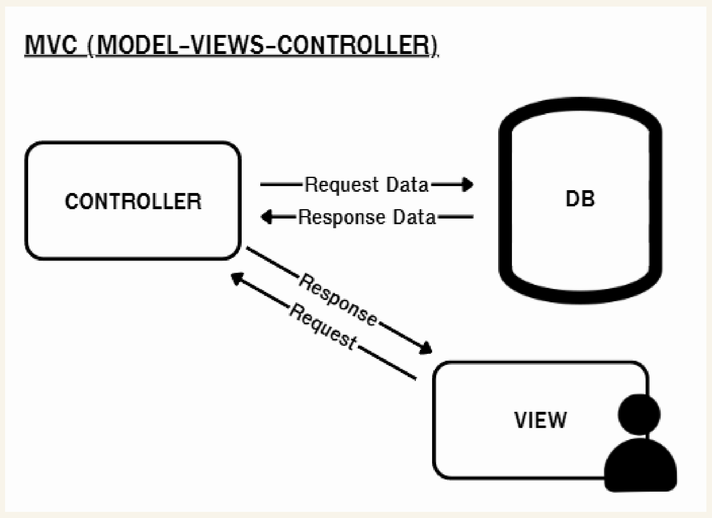
TECHNOLOGY

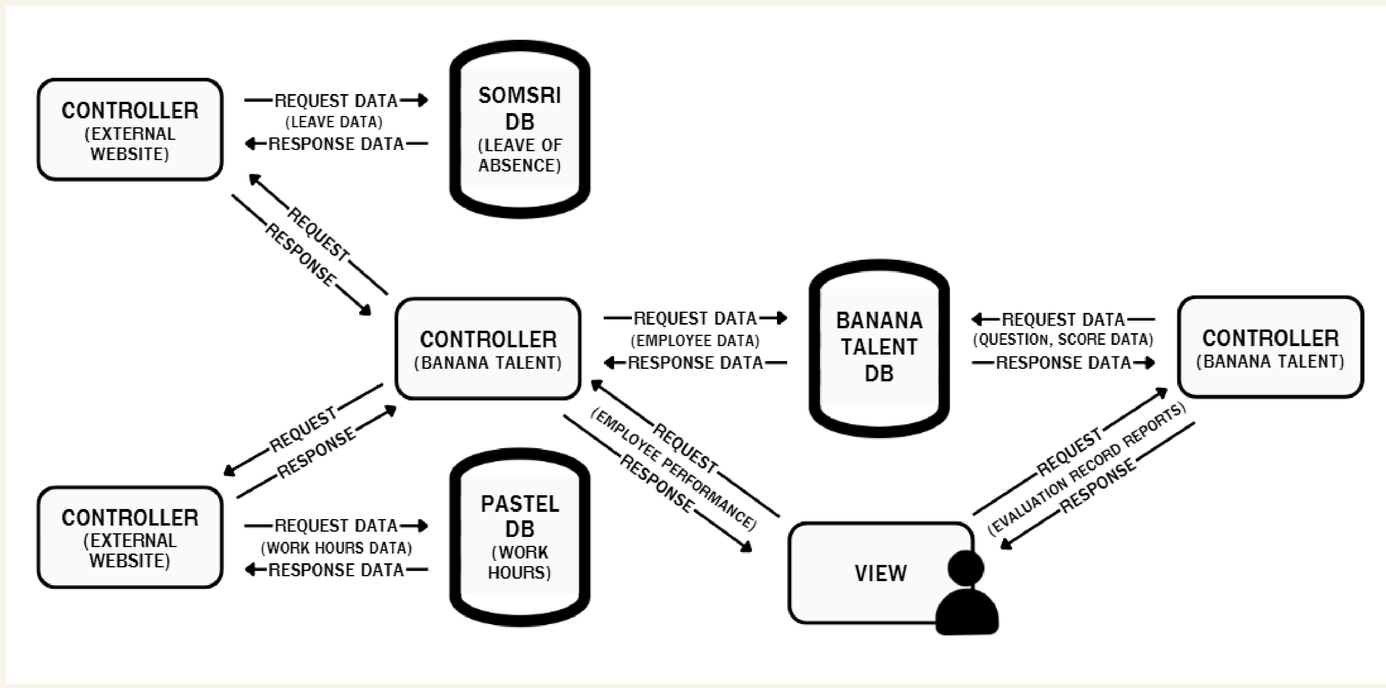


INTRODUCTION

- **Background:** Banana Coding Co., Ltd. is a software house expert in full-stack development, including technologies like .NET and Ruby on Rails.
- **The Problem:** The previous iteration (v1.5) faced significant challenges in data visualization and reporting. Key information such as project financial health, employee evaluation summaries, and historical trends were not readily available, hindering the strategic decision-making process for HR and executives.
- **Project Goals:** To develop version 1.6 with advanced reporting modules, including "Evaluation Record Reports" and "Employee Performance Dashboards," while improving system stability and user experience.

ARCHITECTURE





- **Model (The Data):** Managed by Ruby on Rails using Active Record to interact with the PostgreSQL database. It defines data structures (e.g., Universities, Employments, Users) and handles data validation and persistence.
- **View (The Interface):** Built with Angular and Bootstrap. This layer focuses on presenting data through responsive components, such as Line Charts for work hours and Pie Charts for project proportions.
- **Controller (The Logic):** Serves as the brain of the system. It processes user requests via RESTful APIs, applying business logic before returning data in JSON format to the Angular view.

CONCLUSION

The development of Banana Talent Version 1.6 has successfully delivered a robust internal management tool that fulfills the requirements of the human resources and executive departments. The implementation of new reporting modules enables the organization to accurately track project financial statuses, including revenue, costs, and gross margins, while providing a clear visualization of employee performance and lifecycles. Through rigorous unit testing, the system demonstrated exceptional reliability and accuracy in data processing across all modules. Ultimately, the upgraded system simplifies complex administrative workflows, improves data-driven decision-making, and provides a scalable foundation for future organizational growth.