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Abstract

For professionals and organizations that look to develop analytics skills for data-driven decision making who need an accessible, structured and interactive platform to learn statistics and data analytics without requiring advanced analytical knowledge. “Analytics Academy” is an educational web platform that offers learning modules, interactive quizzes, and practical visualizations that allow users to develop real analytical skills in a flexible, measurable way. Unlike generic non-personalized massive online courses, our product is specifically designed for professionals, with a user-friendly experience, personalized plans, downloadable resources, and live workshops with experts, which maximize practical learning in the workplace.

Introduction

With the rising demand for data literacy in almost every industry, *Analytics Academy* addresses a growing skills gap by offering a solution that connects academic foundations with real-world business needs. Focused on first-time learners and professionals upskilling on the job, it provides an approachable pathway to gain confidence in data-driven decision-making.

Background

Analytics Academy was developed as lightweight, browser-based educational platform using HTML, CSS, JavaScript, and JSON to deliver interactive modules and quizzes without requiring installations. The site structure was designed for flexibility, allowing each lesson and quiz to be independently managed and expanded. Hosting was done via GitHub pages, enabling free, public access and version control. This ensures accessibility, fast loading, and scalability for future enhancements.

Problem- Proposed Solution

The central problem addressed by this project is the lack of an accessible, beginner-friendly, and interactive platform for learning analytics skills. Many learners struggle to find analytics platforms that are both approachable and interactive. Existing tools often require software installations, assume technical proficiency, or fail to provide immediate feedback. *Analytics Academy* addresses these limitations by delivering a fully browser-based experience that is flexible, responsive, and easy to expand. Designed with accessibility and clarity in mind, it enables users to move from basic concepts to applied skills at their own pace without technical barriers.

Methodology-Planning Analysis and Design

The project followed a step-by-step designed approach that began with identifying the learning needs of non-technical users interested in analytics. We outlined learning modules, mapped user flows, and created simple layouts to support clarity. Feedback from early testing helped refine the content and pacing.

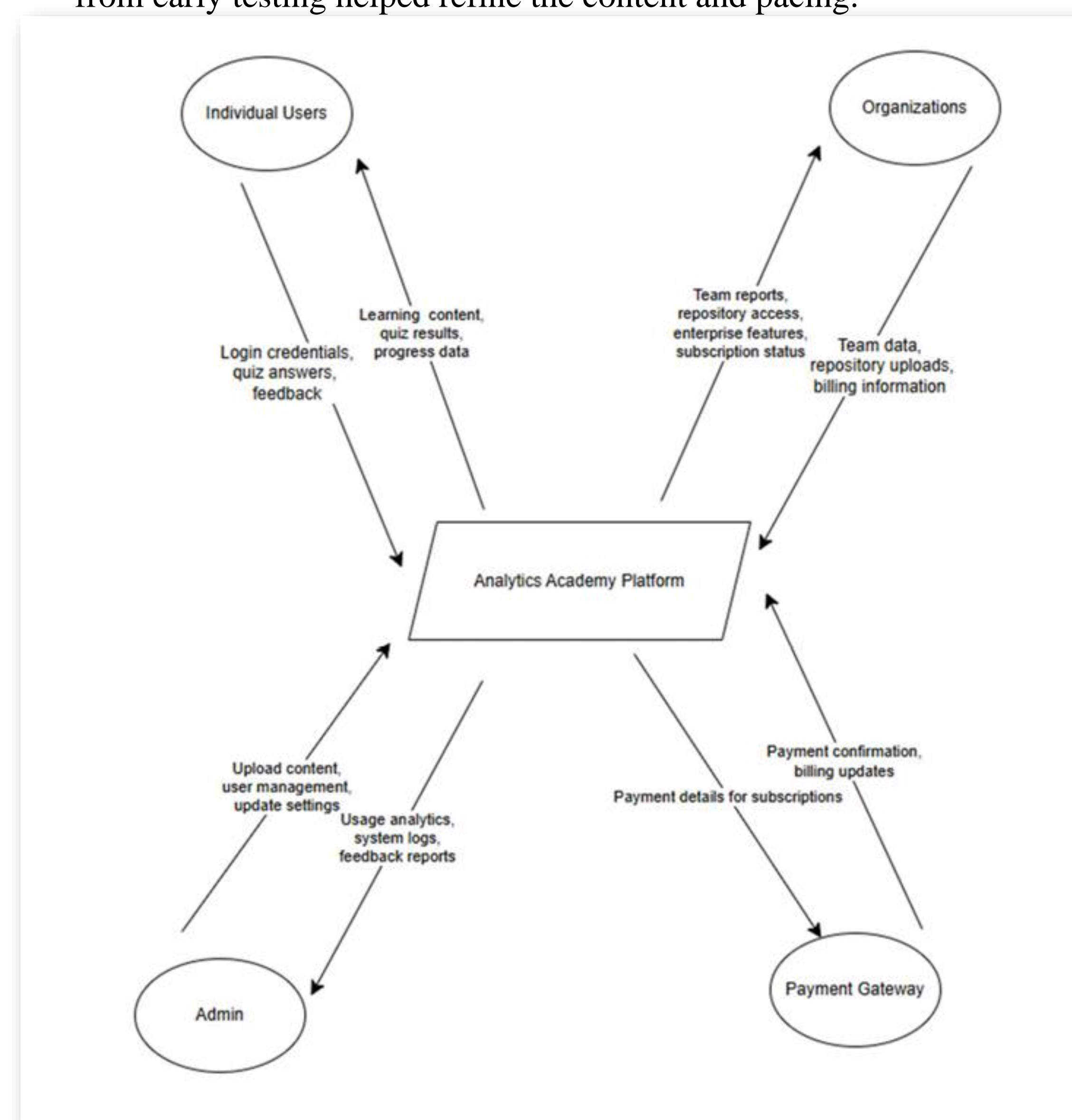


Figure 1: Context Diagram

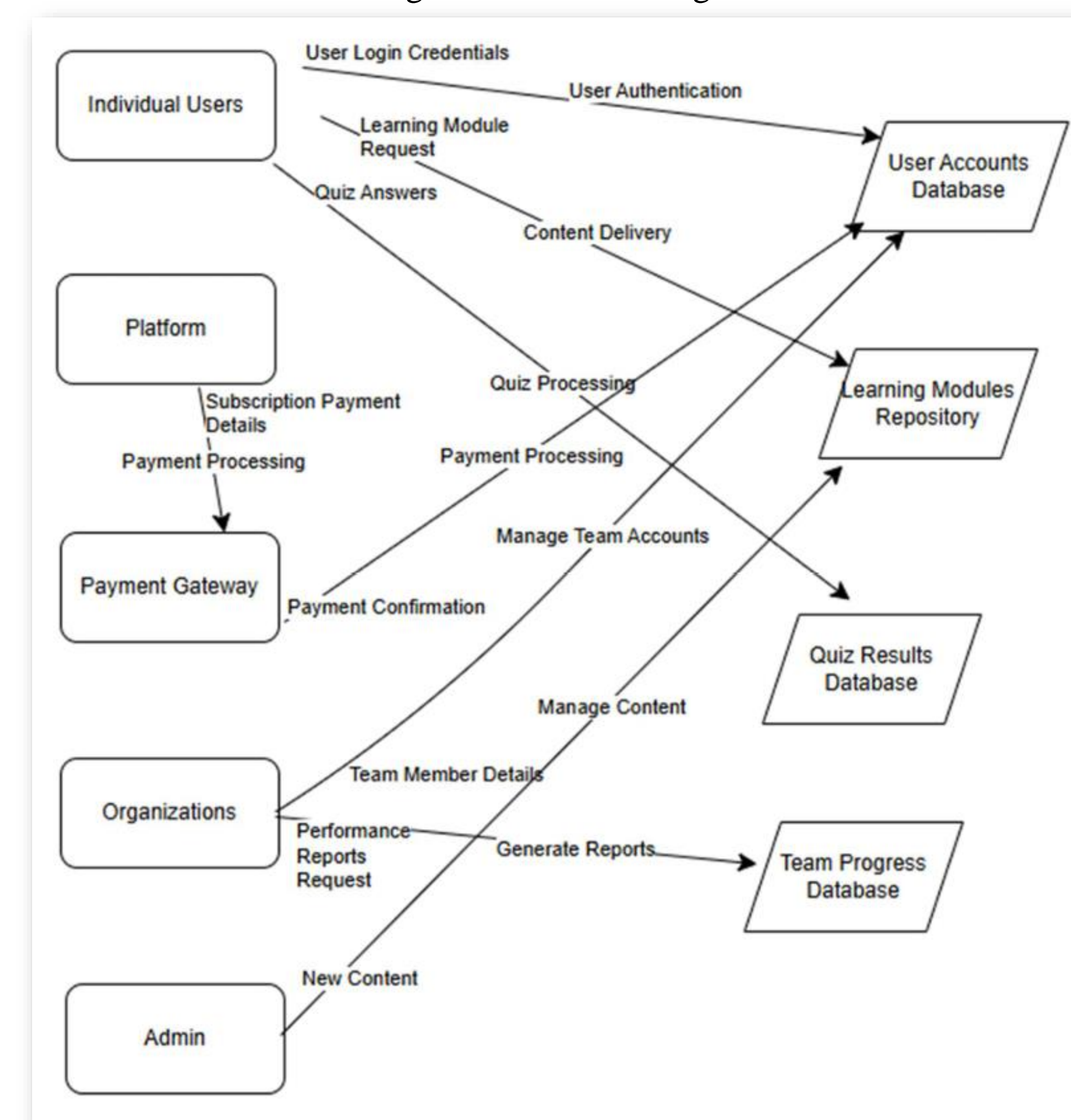


Figure 2: Dataflow Diagram

Results and Discussion- Prototype

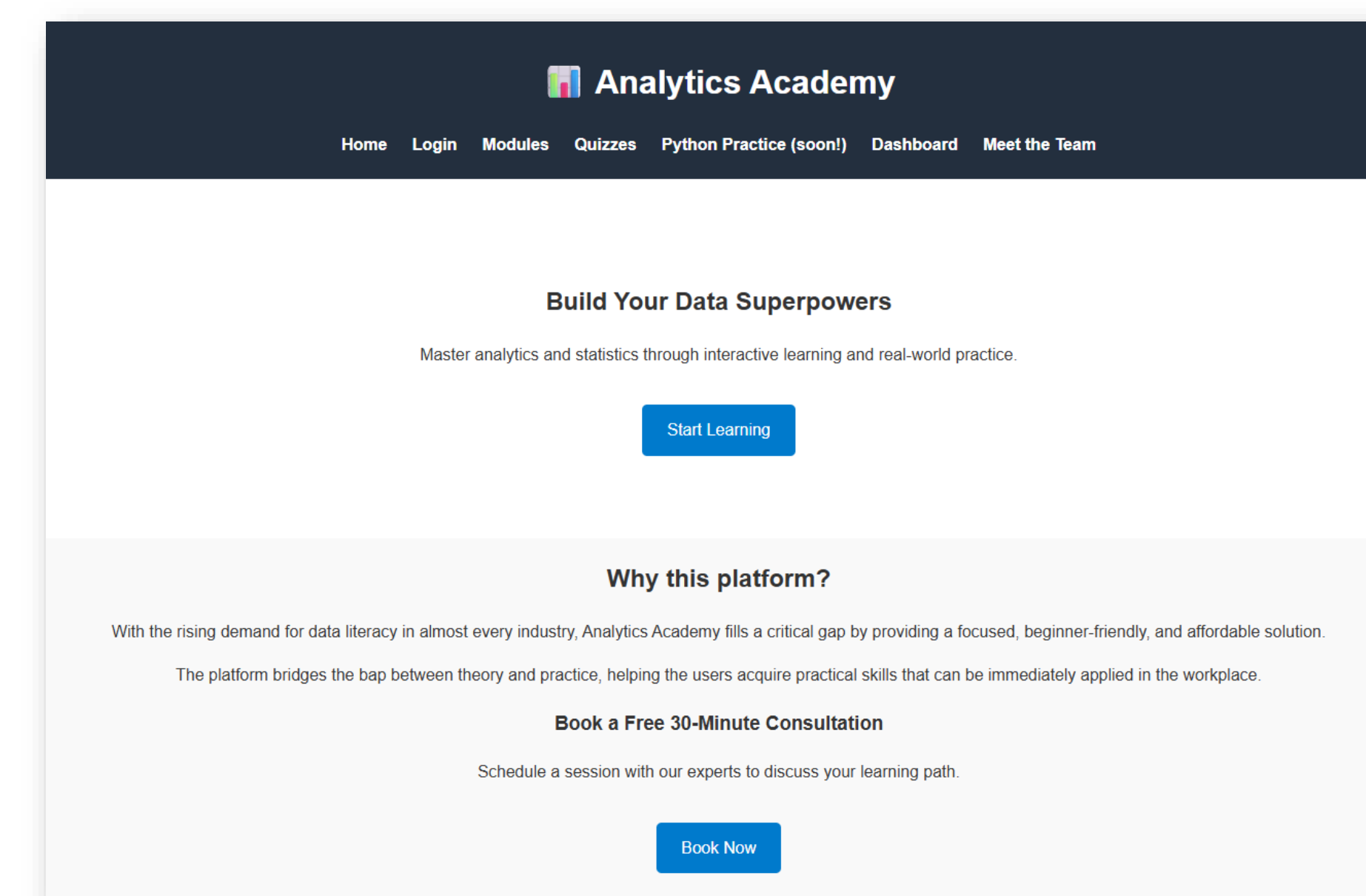


Figure 4: Home Page

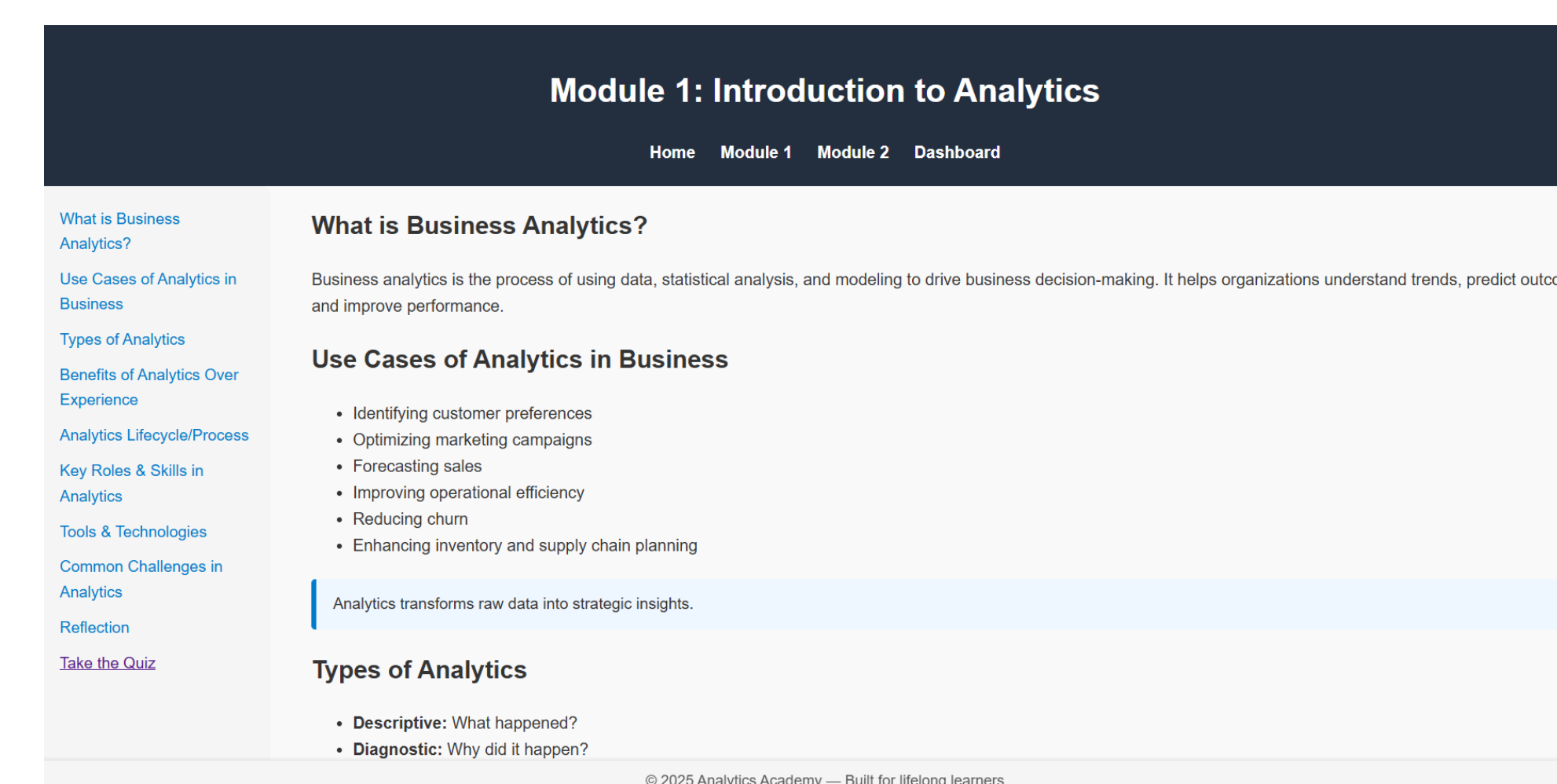


Figure 5: Module 1

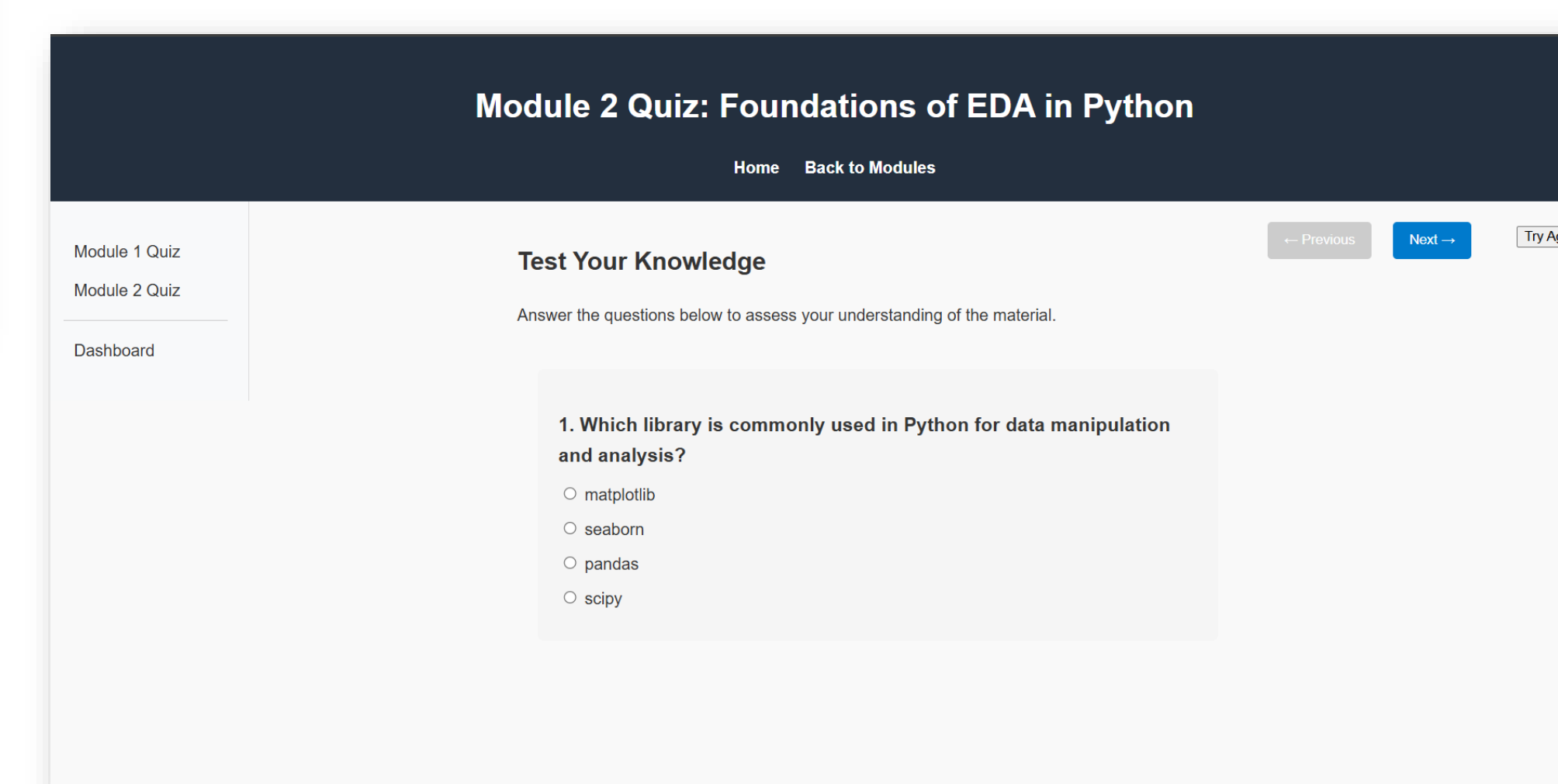


Figure 6: Module 2 Quiz



Figure 3: Gantt Chart

Conclusions

- It's possible to build an accessible, interactive, and modular learning platform using lightweight web technologies.
- Early user flow planning is very valuable.
- Using JSON files is crucial for flexible content updates.
- Future efficiency can be improved with front-end frameworks and automation.
- Open-source is proof that innovation thrives in community-driven ecosystems.

Future Work- Next Steps

Future development will focus on expanding the platform with additional learning modules, fully activating the Python Practice section, and integrating a backend database to support user login, progress tracking, and personalized learning. Plans also include implementing secure payment methods to support premium features and long-term scalability.

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