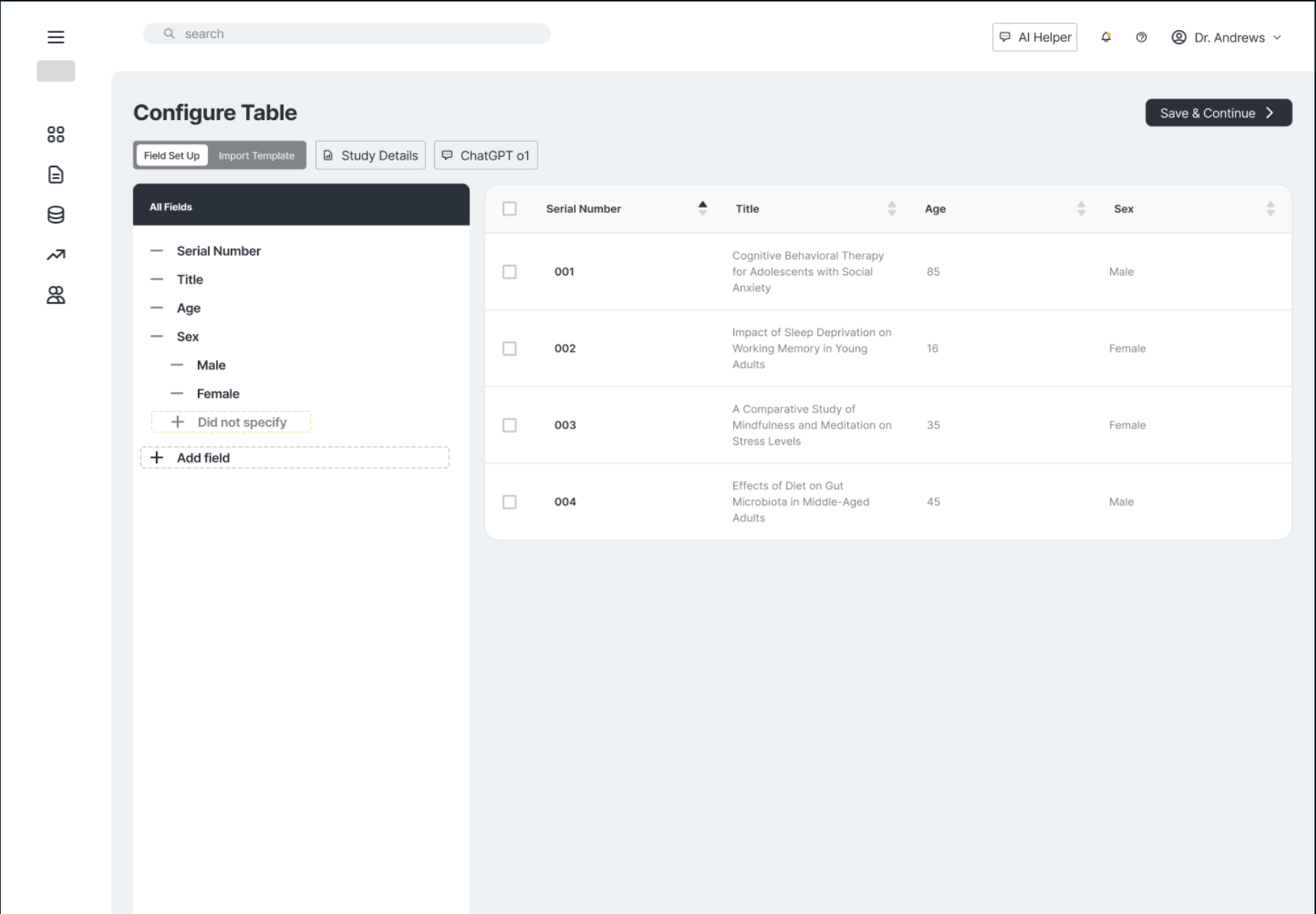


Streamlining Data Extraction in Living Systematic Reviews



Redesigning the LSR Platform with AI Integration

A Case Study by Akhil Kumar Mudigonda

The Challenge: Complex LSR Tools

Cluttered & Complex

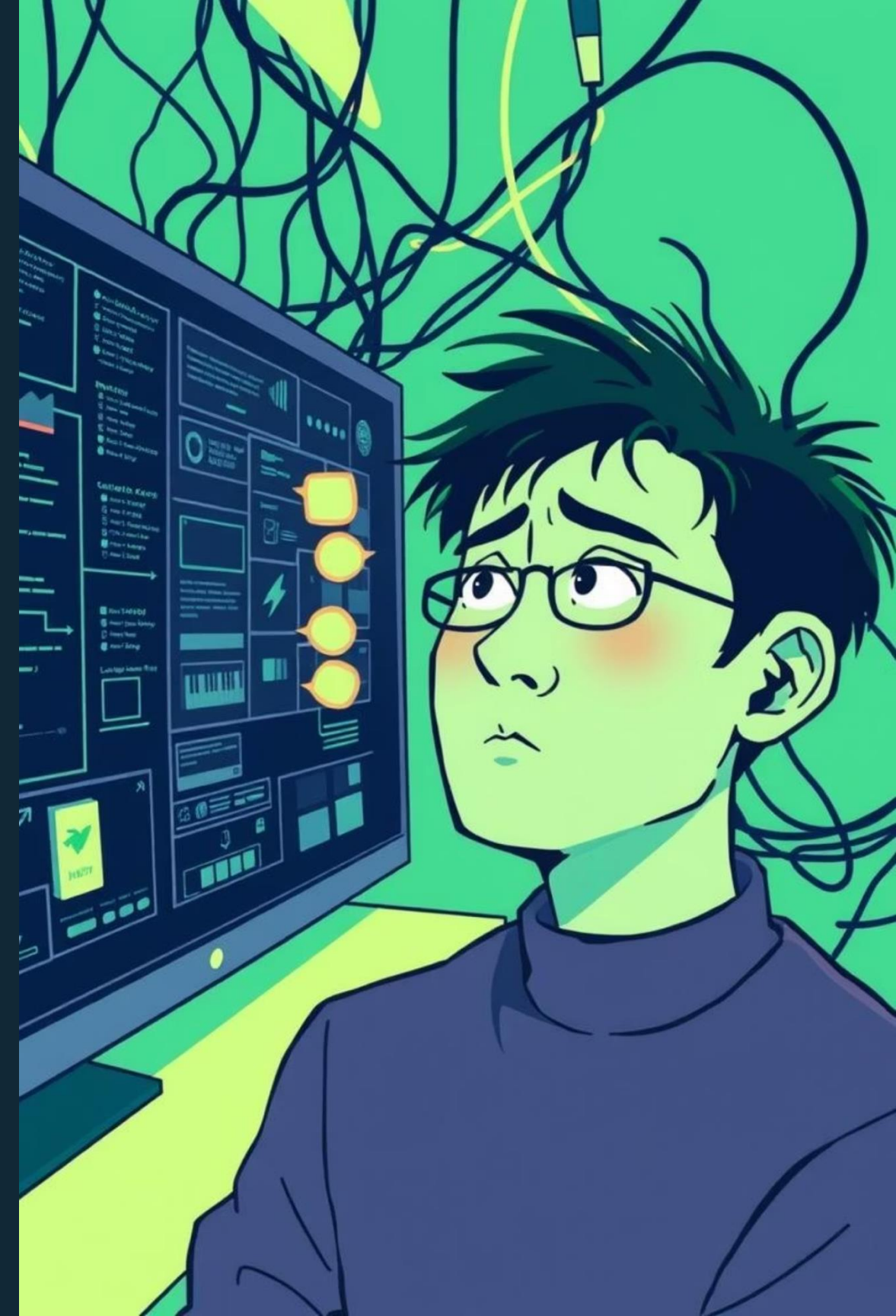
Current LSR tools are often cluttered, leading to steep learning curves and cognitive overload for users.

Lack of AI Transparency

Existing platforms lack clear, transparent AI support, making it difficult to trust automated processes.

Limited Collaboration

Poor onboarding guidance and insufficient collaboration features hinder team efficiency and productivity.





Our Solution: A Clean, AI-Augmented Platform



Modular Design

A clean, modular platform simplifies navigation and user experience.



Role-Based Dashboards

Personalized dashboards offer clear workflow visibility for different roles.



Transparent AI

AI assistance is integrated with full transparency and human control.

Our Design Journey: The Double Diamond

01

Discover

Initial research and problem framing to understand user needs and pain points.

02

Define

Creating user personas and mapping out comprehensive user journeys.

03

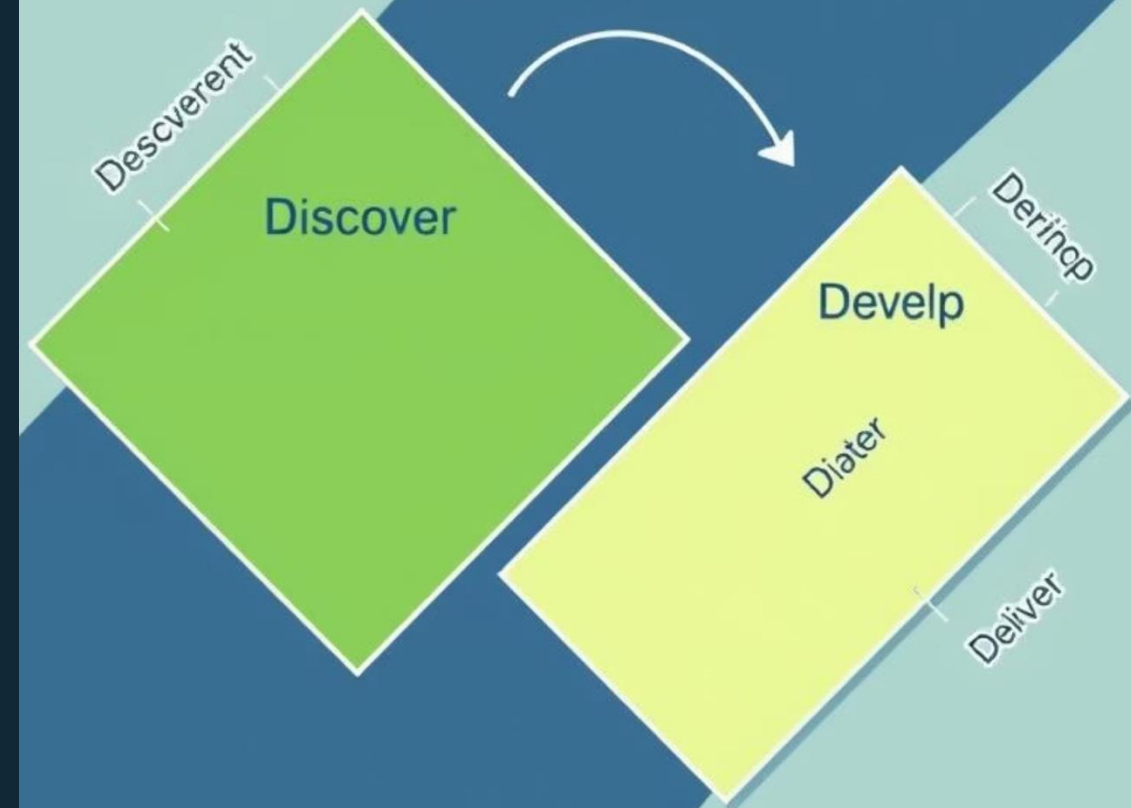
Develop

Iterative wireframing and prototyping to explore various design solutions.

04

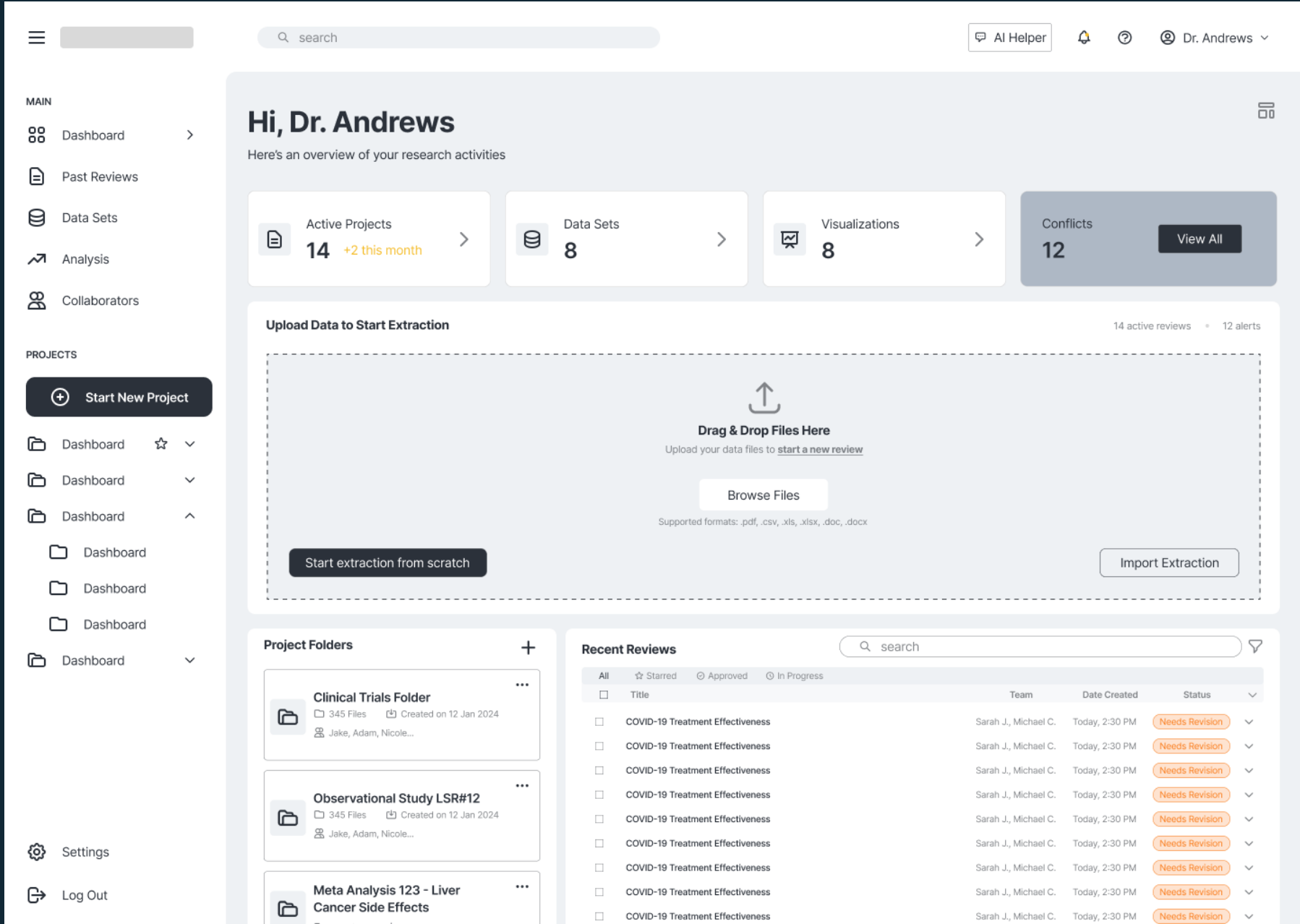
Deliver

Finalizing high-fidelity UI designs for the new LSR platform.



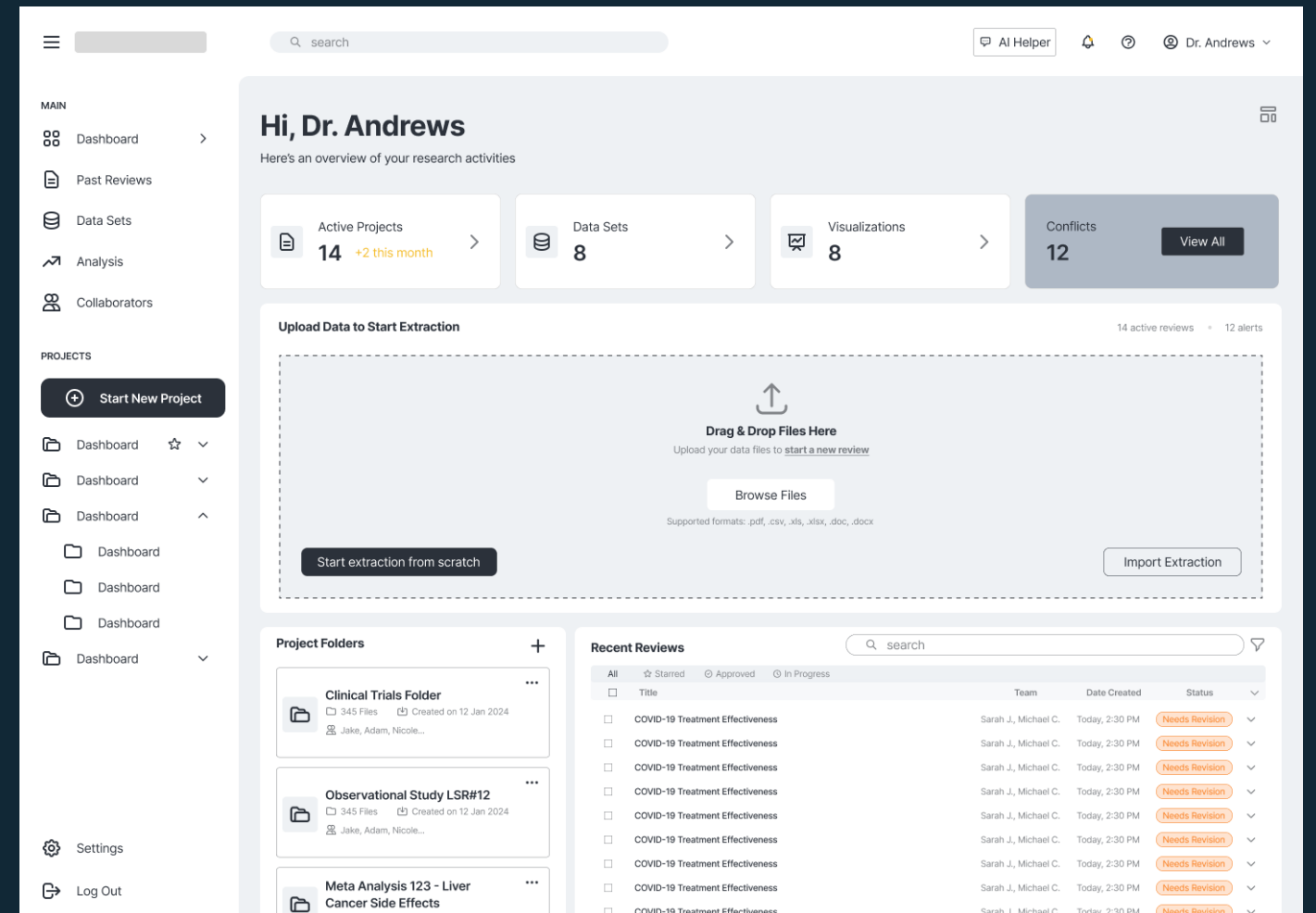
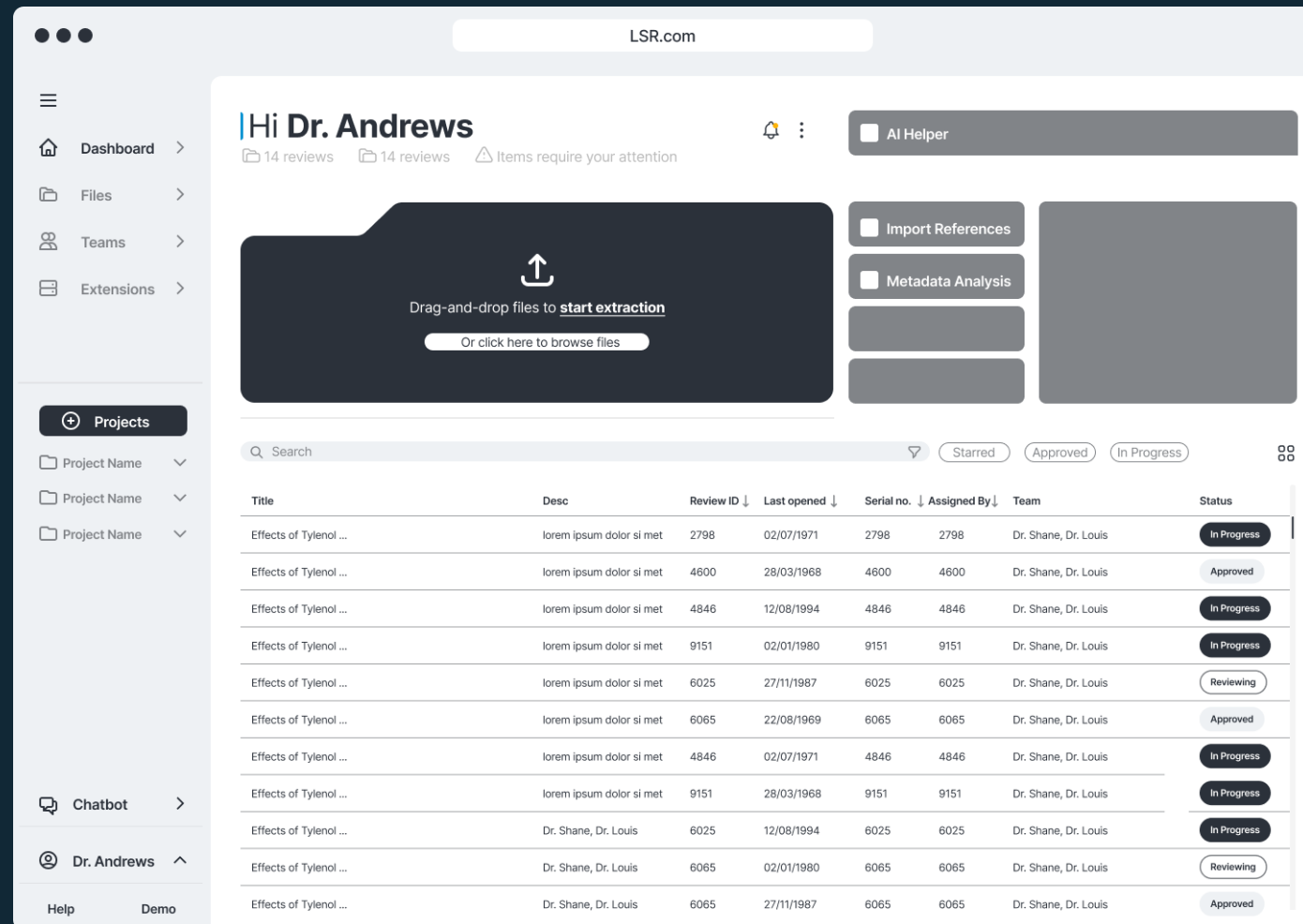
High-Fidelity Design: Dashboard Overview

The redesigned dashboard provides a clear overview of projects and tasks, with intuitive navigation and quick access to key functions.



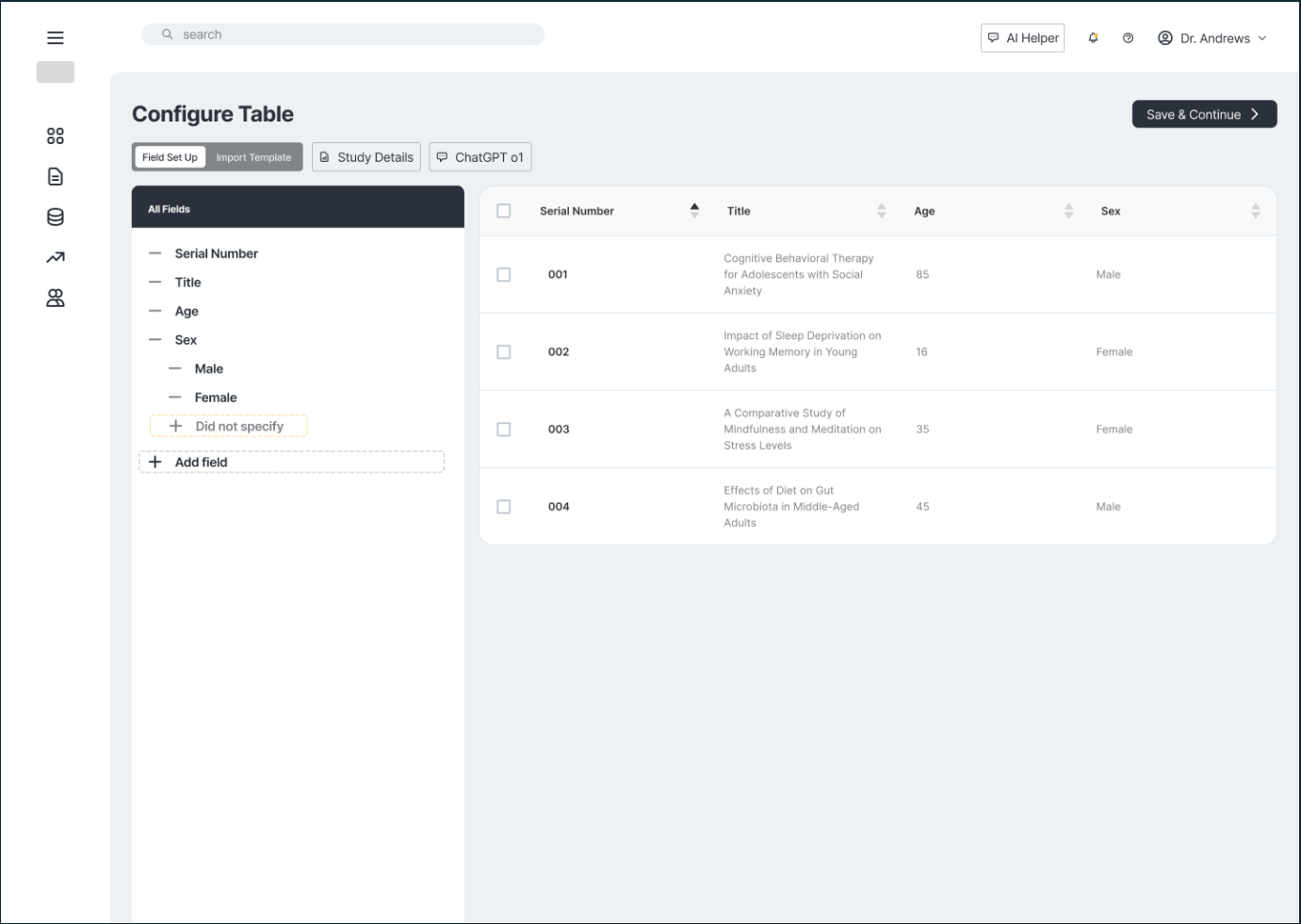
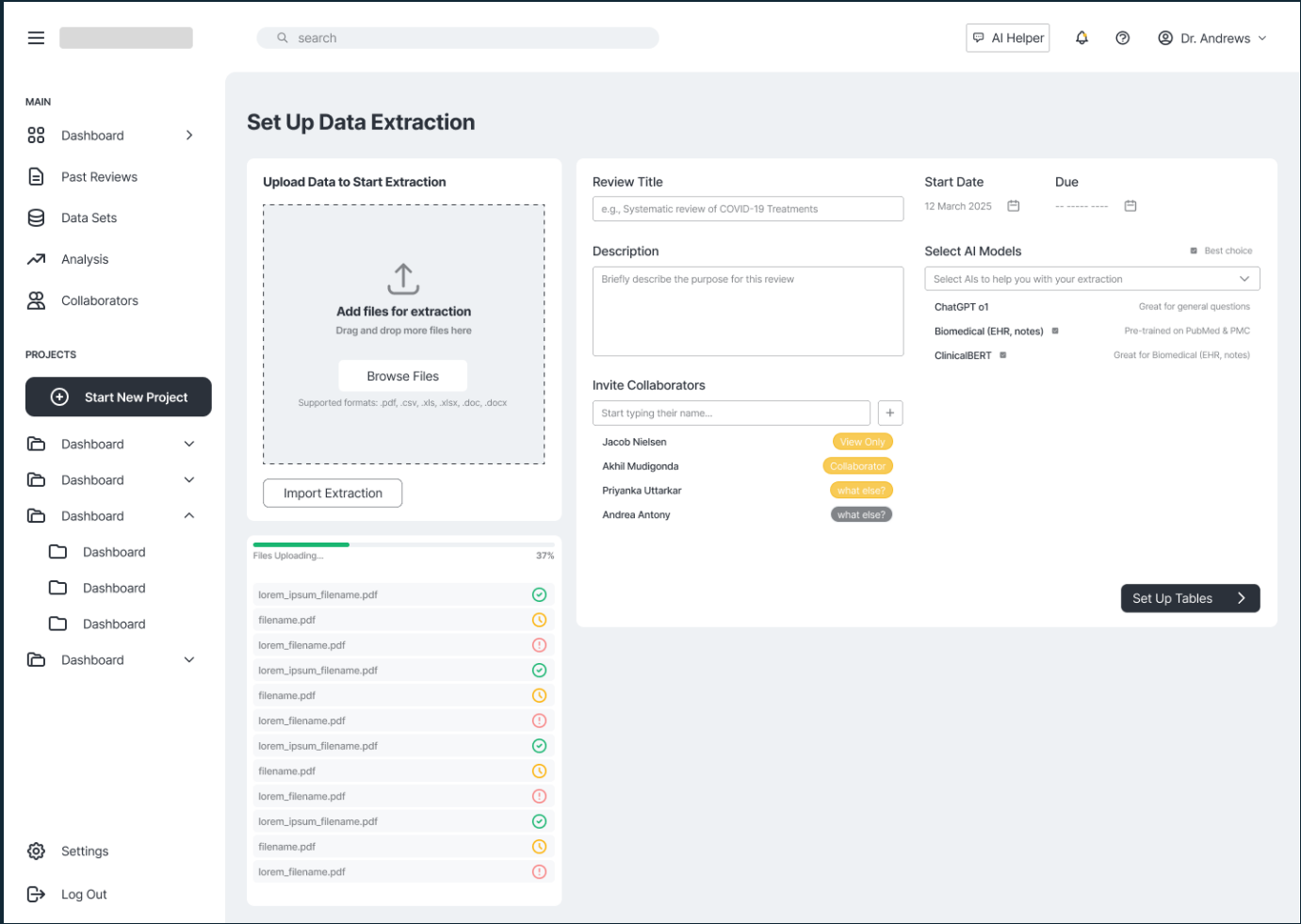
High-Fidelity Design: Data Extraction

The data extraction interface is designed for efficiency, allowing users to easily upload files and manage metadata.



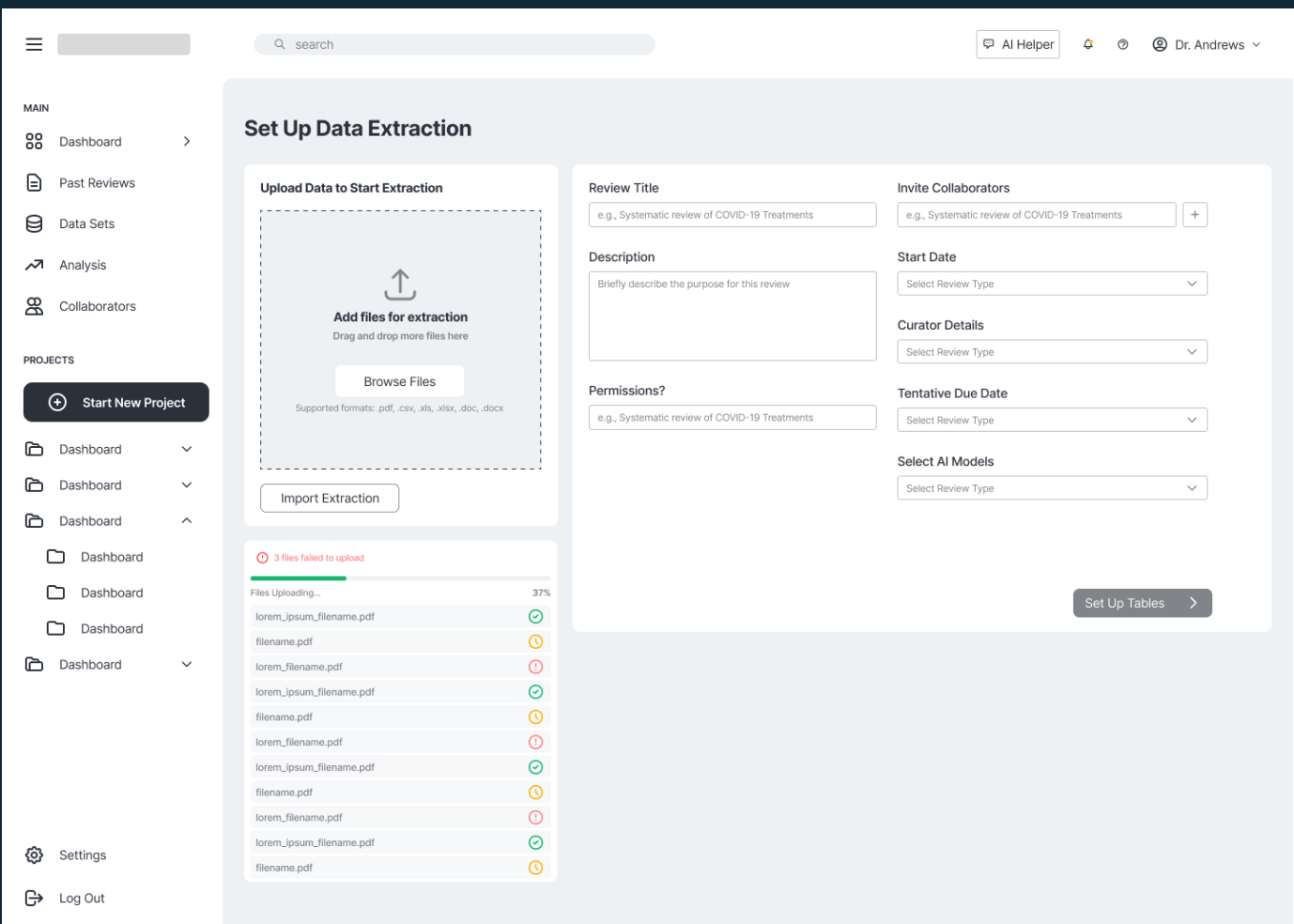
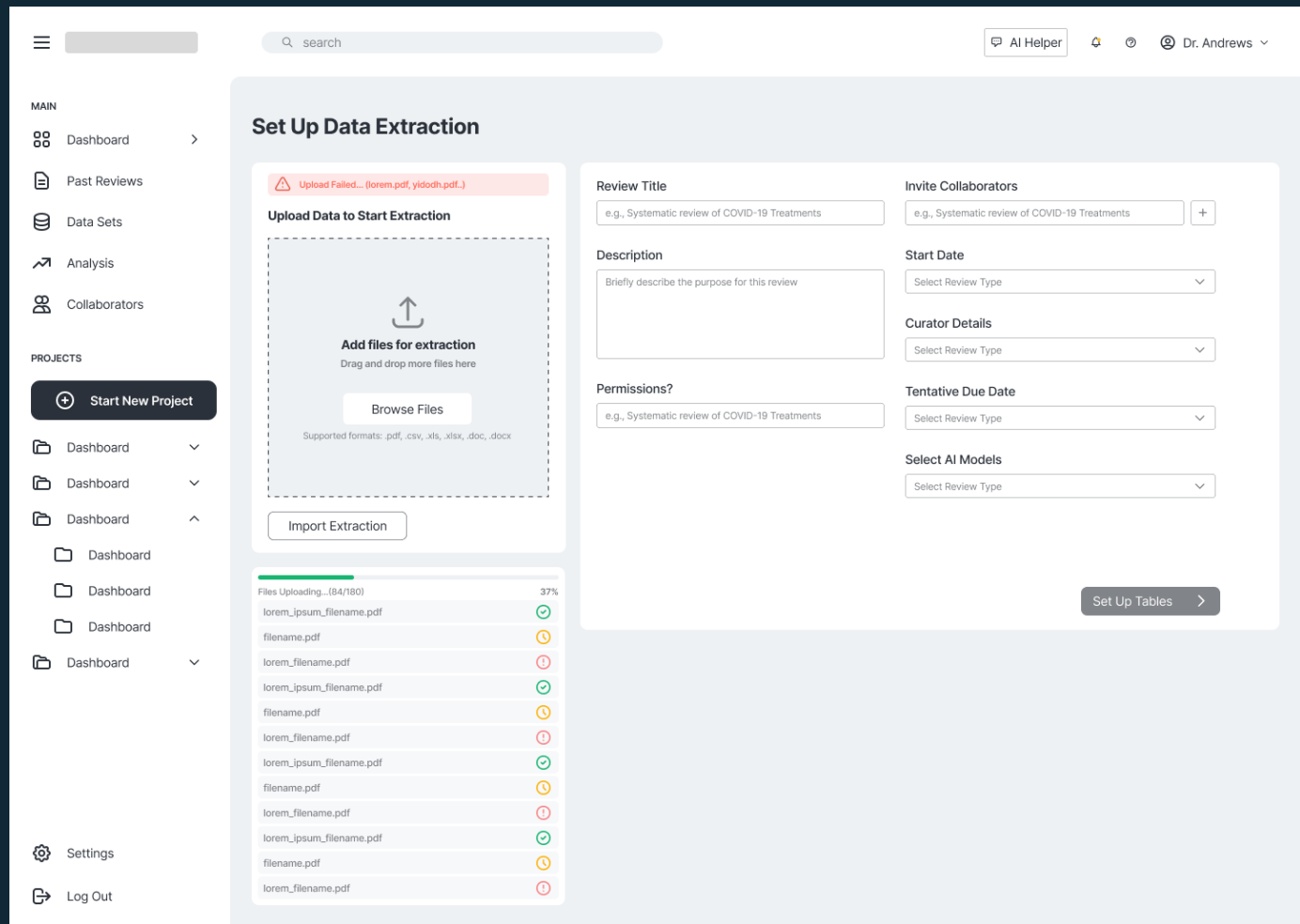
High-Fidelity Design: Data Extraction

The data extraction interface is designed for efficiency, allowing users to easily upload files and manage metadata.



High-Fidelity Design: Data Extraction

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Key Features & Benefits

1

Role-based Dashboard

Simplifies workflow visibility for all team members.

2

AI Suggestions

Provides transparent AI assistance with human review.

3

Three Start Options

Offers flexibility for users of all experience levels.

4

Spreadsheet-style UI

Enables familiar, collaborative editing for data.

5

One-click Export

Ensures fast, error-free output of extracted data.

An illustration of a laboratory setting. In the foreground, two scientists, a man and a woman, are seated at a desk with multiple computer monitors. The man is looking at a monitor, and the woman is typing on a laptop. On the desk are various lab equipment like beakers and a pipette. In the background, there are shelves with more lab equipment and a large window showing a stylized virus particle with a green center and red spikes. The overall color scheme is dominated by reds and oranges.

Transformative Impact

Reduced Cognitive Load

The intuitive design minimizes mental effort for users.

Improved Collaboration

Enhanced features foster better teamwork among researchers.

Transparent AI Processes

Users gain trust through clear, human-controlled AI interactions.

This empowers clinicians and researchers to efficiently engage with living evidence, accelerating insights.

Conclusion & Future Scope

Scalable Foundation

This project lays a robust foundation for future innovation in evidence-based healthcare.



Future Enhancements

- Mobile support for on-the-go access.
- Advanced AI tagging capabilities.
- Deeper integration with existing screening tools.

