

INTRODUCTION

About Astra Zeneca (AZ):

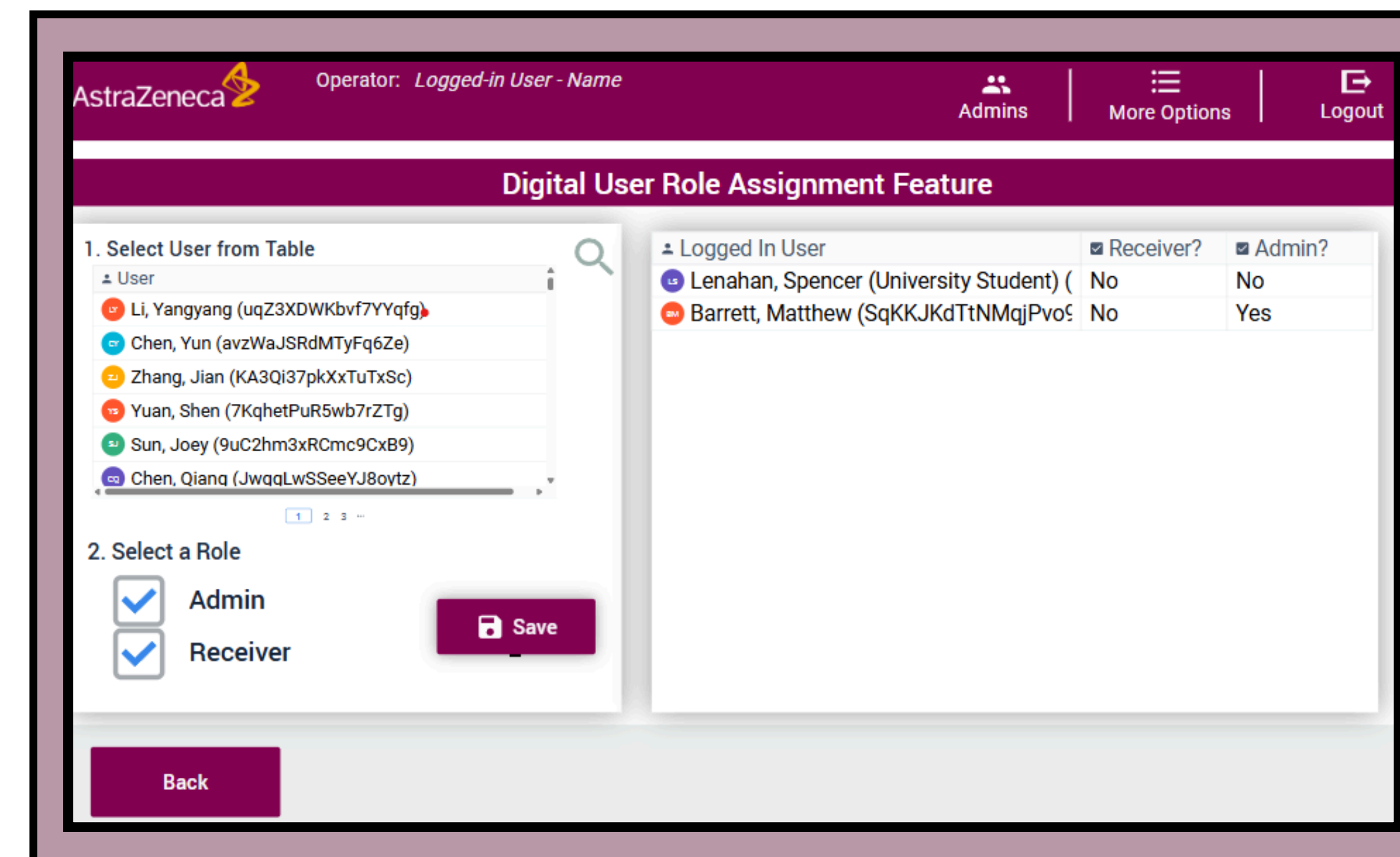
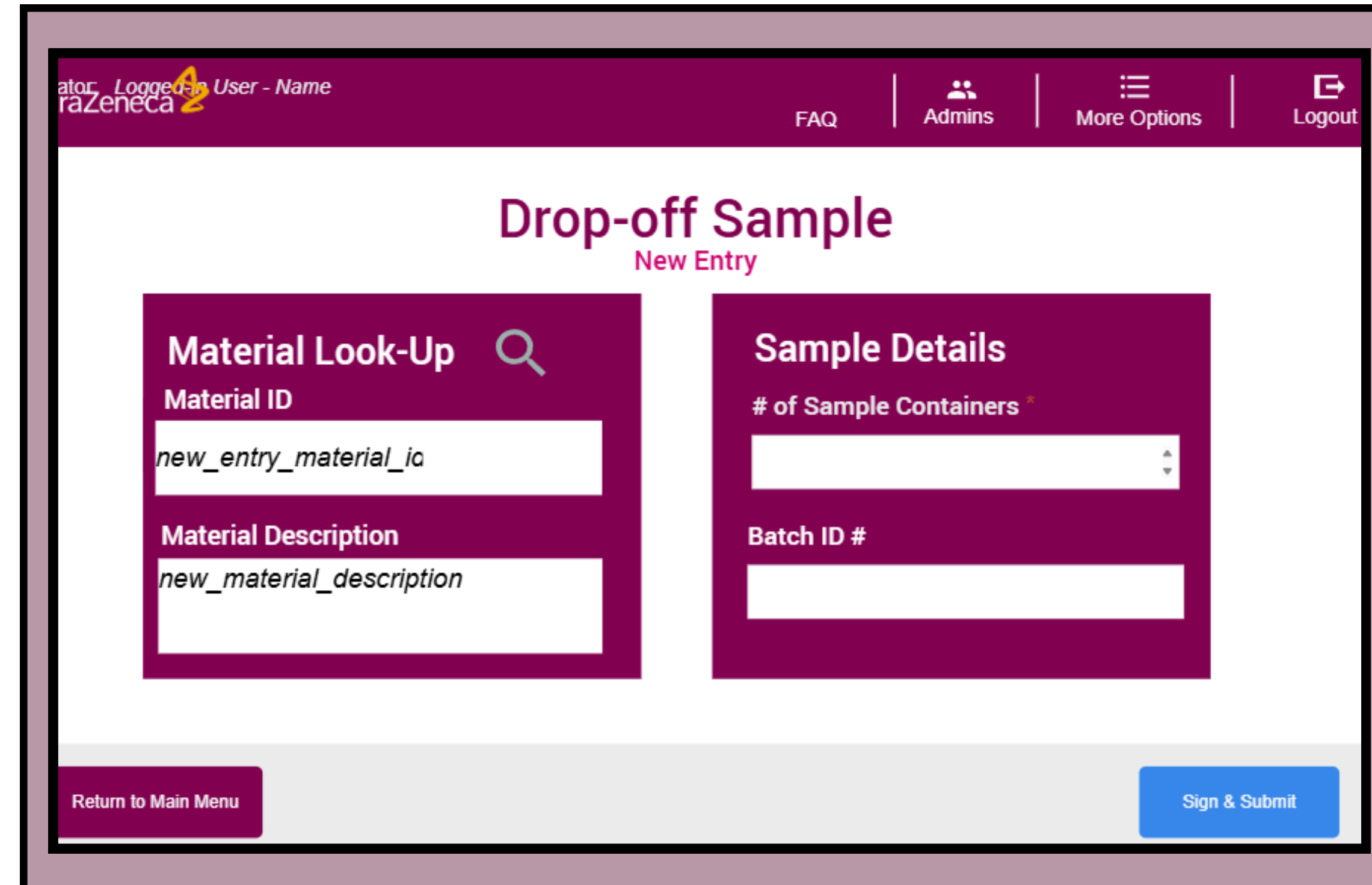
- A global pharmaceutical company committed to developing innovative medicines for patients around the world.
- AZ is transitioning from their current paper based systems to digital systems by developing Tulip Applications.

Project Objective:

- To build a Tulip App for Electronic Logbooks that will capture and log information about their warehouse and QC Lab to help them digitize their process flow.

METHODOLOGY

- Tulip is a powerful platform designed for building interactive applications that streamline data collection, analysis, and visualization.
- Tulip effectively handles large datasets and integrates seamlessly with various databases, enabling efficient management and visualization of QC logbook information.
- **Key Tulip tools utilized in this project include:**
 - Interactive data tables for streamlined entry and retrieval of QC logs
 - Step and record panes for consistent, trackable documentation
 - Integrated real-time analytics dashboards to visualize and monitor QC data
 - Automated workflow triggers ensuring data accuracy and timely reporting
- **Primary advantages of adopting Tulip include:**
 - No-code Development
 - Cloud-native Deployment
 - Real-time Data Connectivity
 - Enterprise-grade Scalability and Security



PROGRESS

- **Timeline**
 - Set up formal meeting with corporate leaders to discuss deliverables and Kanban board to view tasks.
- **Front End Development**
 - Removed barcode scanners from logbook from all areas and implemented alphanumeric entry dialog box.
 - Optimized UX workflow and made improvements likes, consistent button locations, font sizes, expand text areas to allow for full text.
- **Back End Development**
 - Modified data table to incorporate new entry input.
 - Combined sign and submit button to perform a single functionality.
 - Corrected comment notifications and set up email communication.
 - Configured admin functionality allowing to add users to a new table.

PLANS FOR THE FUTURE

- **Scalability & Implementation**
 - Expanding the digital lab book implementation across multiple research teams and integrating with AstraZeneca's broader data management infrastructure.
- **Power BI Implementation for Data Insights**
 - Utilize Power BI dashboards to visualize key research metrics, such as experiment success rates, sample tracking, compliance adherence.

CONCLUSION

- The final Tulip app contains a structured quality control logbook to standardize documentation and digitize process flow for AZ employees.
 - Ensures consistency, accuracy, and compliance.
- A user-friendly interface enhances efficiency and collaboration.
 - Simplifies logging, corrections, and batch management.
 - Multiple employees can simultaneously track and update records.
- Built-in validation and automation reduces errors.
 - Prevents missing information and ensures accurate data entry.
 - Eliminates paperwork, streamlining workflows and improving traceability.

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