BRD Analysis - 2025-08-14

Okay, let’s integrate the Java and Selenium information into the BRD summary. Here’s the revised breakdown, incorporating those elements:

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\*\*BRD Summary – SimplyFI Innovations AI/ML Project\*\*

\* \*\*Objective:\*\* Develop and deploy AI/ML solutions primarily focused on enhancing banking operations (fraud detection, invoice processing) and supporting agricultural decision-making.

\* \*\*Scope:\*\* The project encompasses the development, deployment, and maintenance of AI models utilizing technologies like GPT-4, LLaMA, GANs, and OCR engines. It includes integration with existing systems (ServiceNow, APIs) and \*\*automated UI testing utilizing Java and Selenium for chatbot interfaces and web applications.\*\*

\* \*\*Key Stakeholders:\*\* SimplyFI Innovations (client), internal AI/ML Engineering team, Data Science Interns, and potentially agricultural domain experts.

\* \*\*Functional Requirements:\*\* Model development (accuracy optimization, feature extraction), API integration, chatbot development, data ingestion from various sources (invoices, sensor data), and deployment to on-premises environments.

\* \*\*Technical Requirements:\*\* Utilizing technologies like Docker, Flask, OpenAI’s Whisper, Mistral-7B, and potentially cloud platforms (Azure). Emphasis on model accuracy and performance. \*\*The project will include a detailed scope definition for the Selenium test suite to ensure robust automated UI testing.\*\*

\* \*\*Accuracy Focus:\*\* A core requirement is achieving high model accuracy – specifically, a target of 90% accuracy in agricultural applications and significant improvements in banking use cases.

\* \*\*Non-Functional Requirements:\*\* Scalability of deployed models, robust data security, and maintainability of the AI/ML infrastructure.

\* \*\*Risk/Constraint:\*\* Dependence on the performance of large language models (LLaMA, GPT-4) and the need for ongoing model retraining to maintain accuracy.

\* \*\*Decision Point 1:\*\* Selection of the optimal LLM for specific use cases (e.g., LLaMA vs. GPT-4 based on cost, performance, and data requirements).

\* \*\*Decision Point 2:\*\* Determining the level of human-in-the-loop oversight required for AI-driven recommendations (particularly in the agricultural domain).

\* \*\*Data Source Dependency:\*\* Reliance on the quality and availability of data for training and validation of AI models.

\* \*\*Success Metric:\*\* Primary success will be measured by the demonstrable improvement in operational efficiency and accuracy achieved through the deployed AI/ML solutions.

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\*\*Notes and Potential Questions Arising:\*\*

\* \*\*Selenium Scope:\*\* We need to clarify the scope of the Selenium test suite. Specifically, which applications and interfaces will be targeted? What level of test coverage is expected?

\* \*\*Integration:\*\* How will the Selenium test suite be integrated into the CI/CD pipeline?

\* \*\*Skillsets:\*\* Does the AI/ML Engineering team possess the necessary expertise in Java and Selenium, or will training/external support be required?

Do you want me to delve deeper into any of these aspects, or perhaps focus on a specific challenge highlighted in the revised summary? For example, would you like to discuss the Selenium scope further, or the potential skill gaps within the team?