**Development Process Selection and Rationale**

**Selected Process:** Agile Software Development

**Detailed Explanation of Agile Process:**

The Agile methodology emphasizes iterative development, continuous improvement, and collaboration between cross-functional teams and stakeholders. Agile divides the project into short cycles called “sprints”, where small parts of the software are developed and delivered incrementally.

**Three Rationales for Choosing Agile:**

**1.**

**Adaptability and Flexibility**

Agile supports frequent reassessment and adjustments of requirements. Since Apache Airlines might later introduce new features or modify existing ones (as indicated in the provided specification document), Agile methodology allows the development team to adapt quickly and efficiently to changing requirements.

**2.**

**Improved Communication and Collaboration**

Agile methodology promotes continuous collaboration with stakeholders (Apache Airlines in this case) and encourages regular meetings (daily stand-ups, sprint reviews). This ensures clarity of requirements, prevents misunderstandings, and ensures the final product aligns with user expectations.

**3.**

**Early Delivery and Continuous Improvement**

By developing the software iteratively, the Agile process ensures that working software is delivered early. This enables early detection of any issues, allowing the team to incorporate stakeholder feedback at the end of each iteration. Continuous testing and review help ensure the software quality remains consistently high throughout the project lifecycle.