Key Dependencies

- (SCRUM-3) Re-evaluate cart after residence update
  - Depends on (SCRUM-1) Cart logic
- (SCRUM-5) Shipping cost update depends on SCRUM-3
- (SCRUM-20) Checkout flow
  - Depends on (SCRUM-5) Shipping cost update and (SCRUM-10) Step-by-step checkout UI
- (SCRUM-35) Order status tracker
- (SCRUM-37) Auto checklist tick
  - Depends on checkout flow (SCRUM-20) and (SCRUM-1) Cart notification
- (SCRUM-38) Purchase history
- (SCRUM-39) rack by order # + email
- (SCRUM-36) Admin dashboard

Critical Path

SCRUM-1 → SCRUM-3 → SCRUM-5 → SCRUM-20 → SCRUM-35 → SCRUM-39

The critical path for this sprint follows a user's journey from cart management to order tracking. It begins with SCRUM-1, where foundational cart logic is implemented to flag incompatible items. SCRUM-3 builds on this by re-evaluating the cart when a student updates their residence profile. Once selections are validated, SCRUM-5 calculates real-time shipping costs based on move-in details, feeding into SCRUM-20, the core checkout functionality. After a successful order is placed, SCRUM-35 enables users to track their order status. Finally, SCRUM-39 completes the user flow by allowing order tracking via order number and email, providing visibility into delivery progress even for non-logged-in users. This sequence reflects the essential end-to-end experience from product selection to post-purchase tracking and was prioritized to ensure a seamless checkout and fulfillment experience for students.

Risk Areas

- Initially had issues syncing checklist and cart, but resolved with tighter integration logic.
- Google Drive image URLs sometimes failed due to permission or ID issues; added fallback handling.

Lesson Learned

- Importance of verifying test data consistency with real database records (e.g., product IDs that don't exist).

- Earlier integration testing could have reduced end-to-end debugging effort.

- Good teamwork improved sprint velocity even after merge delays in previous cycles.