Spree: Test Strategy

1. Introduction:

Spree is an E-commerce (**electronic commerce**) application. This application involves the activity of electronically buying products on online services or over the Internet.

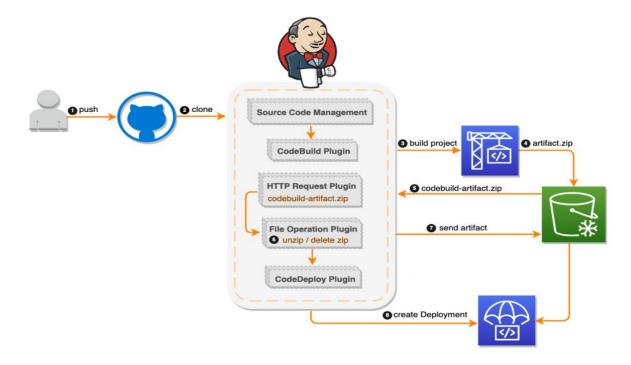
2. Featured to be tested:

- Easy login & registration
 - User-friendly product filtering and sorting
 - Detailed product descriptions
 - Product gallery
 - Shopping cart
 - Shipping options
 - Order summary
 - Secure and easy in-app payments
 - Ordering an invoice and adding company data

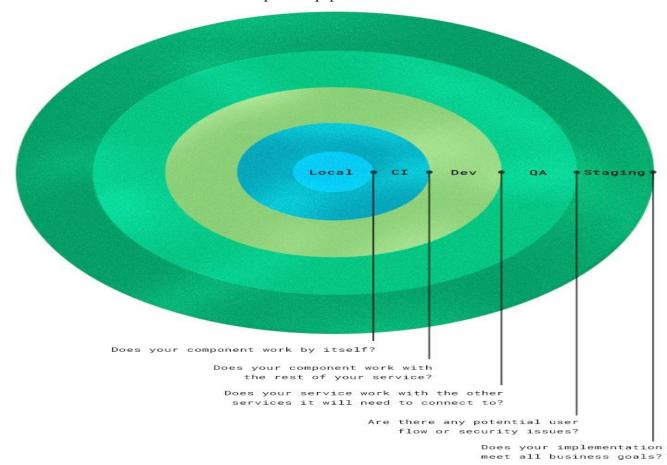
3. Featured not in scope of current release:

- Returns and checking the return status
- Checking the shipping status
- The number of items users are seeing/left on the list
- Checking item availability in specific locations
- Item availability reminder
- Wishlist

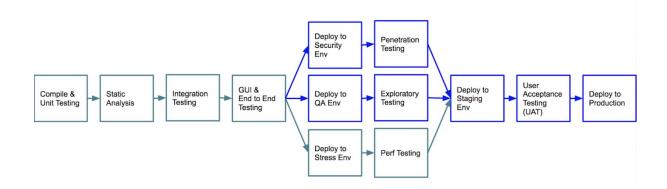
4. Build Path to production



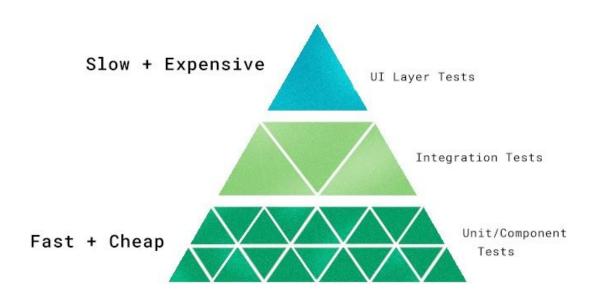
How tests fit into a software development pipeline.



5. Build Tasks



6. Types of tests and Test Pyramid:



- Unit/component test: These cover the smallest possible components, units, or functionalities. They're the cheapest and fastest tests to run since they don't require a lot of dependencies or mocking. These should be done early to get them out of the way.
- **Integration test:** These check how well each unit from the previous stage works with the other components, units, and functionalities. In a broader sense, it can test how services (such as APIs) integrate with one another.

- **UI layer testing:** This is automated browser-based testing which tests basic user flow. It is expensive to set up and slow to run, so it should happen later in the pipeline.
- Performance testing- a top priority in Spree application.

7. What are we not covering in tests:

Security Testing
Infrastructure Testing

8. Test Tools

UI Automation: Selenium Webdriver, TestNG

CI: Jenkins

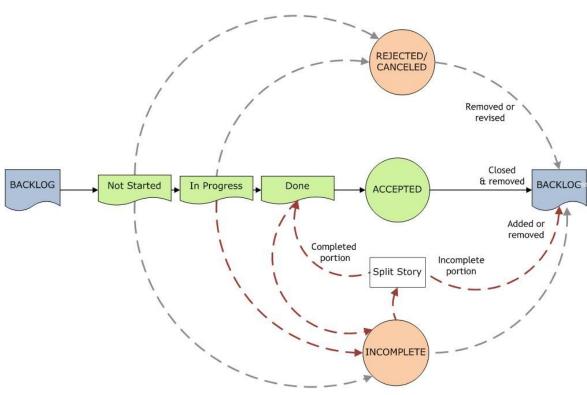
Configuration management and Version Control: GIT & GIThub

Performance Testing: JMeter

Test Management and Defect Tracking: QC

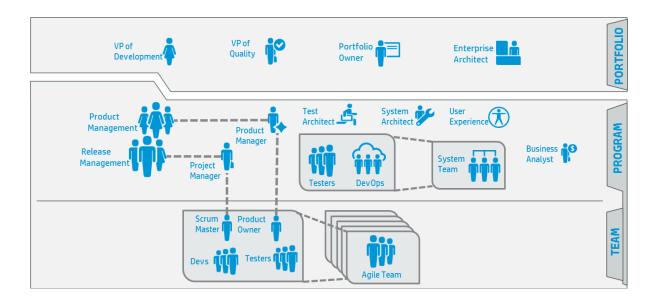
9. Story Lifecycle:

State diagram for a user story



AgileDemystified.com

10. Architecture level Strategy



11. Defect life cycle

BUG LIFE CYCLE Diagram:

