## Activity: Other Agile Frameworks and Approaches

### Scenario:

You are part of a team of Agile practitioners embarking on developing a feature for an e-commerce platform that will enable users to search and filter an array of products easily. This feature is critical for users to find and explore products, enhancing their shopping experience and increasing the likelihood of purchases.

Below is an outline of the project details:

**Project objective:** Create a robust Product Search and Filter feature that allows users to:

● **Search:** Enter keywords to find products by name, description, or other attributes.

● **Filter:** Narrow down search results based on categories such as outdoor clothing, sportswear, price, customer ratings, and in-stock.

● **Sort:** Organize results by criteria like relevance, price, popularity, or ratings.

**Project team size:** The team, which includes the project manager, product owner, developers, designers, and testers, has ten members.

Your team must ensure the feature is user-friendly, efficient, and capable of handling large product databases without compromising speed. Users are expected to frequently use this functionality to navigate the platform, making it essential for a seamless shopping experience. To achieve this, you’ll need to apply XP, Crystal, and DSDM practices to ensure quality, frequent delivery, and alignment with business goals.

### Step 1: Apply the XP principle of Test at all levels

Identify and outline a testing strategy that includes unit, integration, and acceptance testing to ensure quality across all levels for the Product Search and Filter feature.

Below is a brief definition of each testing type to guide your thinking:

● **Unit testing:** Verifies individual components or functions of code/features in isolation to ensure they work as expected.

● **Integration testing:** Checks how different parts of a feature work together, ensuring they interact correctly.

● **Acceptance testing:** Validates the entire system against user requirements to confirm it meets business needs and is ready for release.

| **Testing type** | **Testing strategy** |
| --- | --- |
| **Unit testing** | **Tip:** Focus on testing individual components of the feature, such as….. These tests ensure that…… |
| **Integration testing** |  |
| **Acceptance testing** |  |

### Step 2: Develop a strategy for frequent delivery as a Crystal practice

To complete this step, you’ll need to apply Crystal’s practice of Frequent Delivery in the two subsequent tasks:

**2a:** Consider the project objective and the requirements of the Product Search and Filter feature given in the scenario. Use this information to develop a release plan for delivering the Product Search and Filter feature increments.

Increments will include basic search, basic filtering, advanced filtering and sorting, optimization, and usability enhancements.

| **Increment** | **Description** |
| --- | --- |
| Example: Increment 1: Basic search | Release a simple keyword search that allows users to find products by entering a name. This increment provides early value by giving users fundamental search functionality. |
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|  |  |

**2b:** Determine the most suitable Crystal variant for this project based on team size, criticality, and communication needs.

| **Crystal variant (Color)** | **Reason for selection** |
| --- | --- |
| Example: Crystal Red | The Crystal Red variant is the most suitable for this project due to………….. It supports team communication through…..accommodating the…….complexity of the project. |

### Step 3: Focus on business needs as a DSDM practice

Use the information from the scenario to outline how the Product Search and Filter feature directly supports the e-commerce platform's business objectives.

| Example: The Product Search and Filter feature supports business objectives by........which leads to………. |
| --- |