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# UserStory QE Agent

Driving efficiency and quality in user story management across the SDLC

# Introduction



## User Story QE Agent: Driving Efficiency and Quality in User Story Management Across the SDLC

### Overview



**Detects issues early** to reduce defects in requirements and user stories.



**Ensures higher quality deliverables** in later development stages.



**Evaluates user stories** using a quality score based on standard validation rules.



**Auto-corrects issues** using project context and suggests improved user story versions.

### Target Users



Agile  
Scrum  
Teams



QA  
Teams

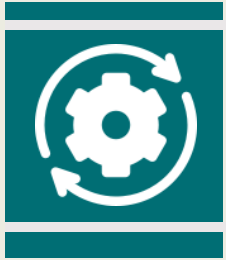


Business  
Analyst



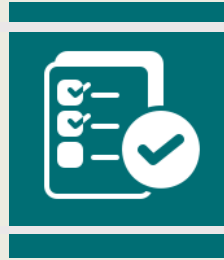
DevOps Engineers responsible for managing story quality gates

# Key Features



## **Headless Operation:**

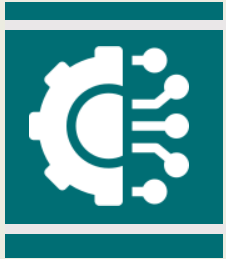
Functions quietly in the background, preserving the user experience without disruption.



**Validation Rules:** Ensures user stories adhere to industry-standard static testing methodologies, guaranteeing consistency and precision.



**Auto Context Optimization:** Leverages intelligent artifact retrieval to improve validation accuracy and relevance.



## **Seamless Integration:**

Automatically integrates results and recommendations back into Azure DevOps streamlining tracking and resolution.



## **Early Issue Identification:**

Proactively identifies potential issues, enhancing user story quality and preventing defects in the final stages of the SDLC.



**Quality Scoring:** Evaluates user stories based on established validation rules, generating a quality score to measure story readiness.



**Auto Fix & Recommendation:** Automatically resolves issues by referencing the project context, suggesting an optimised version of the user story in the comments for review and acceptance by the end user.

# Workflow

## Intelligent User Story Extraction

- Automatically extracts key story data from Azure DevOps, including descriptions, attachments, and linked epics.
- Ensures complete context is available for accurate validation and review.



## Azure DevOps Custom Fields Setup

- Creates custom Azure DevOps fields during the first validation to capture results and scoring.
- Enables tracking of user story quality throughout the development lifecycle.



## Automated Static Testing Validation

- Applies predefined UST-based rules to validate story structure and content.
- Flags failed stories for further analysis while the results are logged successfully, when the story passes.



## Failure Analysis & User Story Optimization

- Identifies reasons for validation failure
- plugin retrieves relevant project context, like Epic descriptions & Story attachments
- Generates optimized user story suggestions aligned with best practices and validation criteria.



## Azure DevOps Updates and Final Outputs

- Adds Azure DevOps comments with improved user story suggestions.
- Updates custom fields with validation scores and results.
- Provides ongoing feedback to improve future stories.



# Dashboard Screenshots



## Extensions

Installed Requested Shared



**UserStory QE Agent** by UST  
Driving Efficiency and Quality in User Story Management Across the SDLC

Shajahan Pulikkal(UST,GB) commented just now

### Evaluation Result -

- **Measurability:** The story lacks specific, measurable outcomes. Terms like "quickly" and "smooth experience" are subjective. To improve, specify metrics such as "The product catalog should load within 2 seconds." - **Unambiguity:** The language is vague, particularly "intuitive" and "user-friendly." Clarify these terms with specific criteria or examples. - **Testability:** The acceptance criteria do not directly relate to the user story's goal. Ensure that the acceptance criteria are directly testable outcomes of the story's user actions, such as "User can view the product catalog within 2 seconds." - **Completeness:** The acceptance criteria do not align with the story's goal of browsing and wishlisting products. Add relevant criteria like "User can add items to wishlist" and "Product catalog loads within 2 seconds."

### Updated Description:

As a guest user, I want to browse the product catalog and add items to my wishlist, so that I can explore and save products of interest without creating an account.

### Updated Acceptance Criteria:

1. The product catalog should load within 2 seconds.
2. User can view detailed product information from the catalog.
3. User can add up to 20 items to their wishlist.
4. User can remove items from their wishlist.
5. Wishlist should persist items for the duration of the session.
6. User can sort products by price and popularity.
7. User can filter products by category.

DeliveryOffice-QE / BETA Platform / Boards / Work Items

Recently updated | Back to Work Items

**USER STORY 746**

746 As a guest user, I want to browse products quickly so that I can have a smooth experience.

No one selected | 3 Comments | notification X +

State:  New Area: BETA Platform

Reason:  New Iteration: BETA Platform\Sprint8

Details **UserStory QE Agent**

Validation completed!

VALIDATION CRITERIA	STATUS
Measurability	FAILED
Conciseness	PASSED
Unambiguity	FAILED
User-orientation	PASSED
Testability	FAILED
Completeness	FAILED
Design independence	PASSED
Format quality	PASSED

**USER STORY 746**

746 As a guest user, I want to browse products quickly so that I can have a smooth experience.

No one selected | 4 Comments

State:  New Area: BETA Platform

Reason:  New Iteration: BETA Platform\Sprint8

**Validate** Validation Score: **0.40**

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**Thank you**