CSCE 606 – Software Engineering
Project: Inventory System

Sprint # 1 – Retrospective

Customer: Dr. Robert Lightfoot

Links:

- Deployed app: https://inventory-system-lightfoot-c73b05a2c5ae.herokuapp.com/
- Github Project: https://github.com/orgs/tamu-edu-students/projects/101
- Github Repo: https://github.com/tamu-edu-students/CSCE-606-Inventory-System
- Shared folder: https://drive.google.com/drive/folders/1NsQfvHf9n272E8VKVghdkU4B7EIk4EYl
- Discussion Channel: https://app.slack.com/client/T08A4A8U89M/C08AJRT0UTC

Spring #1 Dates:

- Started date: 01/31/2025
- Finished date. 02/10/2025

Team and Members contribution:

Name	Role	Contribution (%)	Points	Comments
Rafael Morales	PO/DEV	19	6	Contribute in Models Creation, Simple HTML Dashboard
Calvin Parker	SM	0	0	No Contribution
Khush Patel	SM/DEV	19	6	Contribute in TDD for all user stories
Saba Mostofi	DEV	19	6	Contribute in BDD for all user stories
Arun Akash	DEV	24	7	Contribute in the User Authentication
Sid Rayapur	DEV	19	6	Contribute in TDD for all user stories

Note: After the Sprint plan, we weren't able to communicate with Calvin Parker. Everybody contributed to the SM tasks.

Sprint #1 Goal:

- First customer meeting ✅
- Create Repository and Deployment app ✅
- User Authentication Feature ✅
- Create User, Bin and Item models ✅

Sprint #1 Achievements:

- All user stories related to User Authentication were successfully implemented in this sprint.
- All user stories for **CRUD operations** on **User, Bin, and Item** were completed.
- A basic HTML UI for CRUD operations was developed, allowing users to create, read, update, and delete records for the models mentioned above.

Sprint #1 Backlog:

For Sprint #1 Plan, in order to meet the deadline and due to a misunderstanding and lack of knowledge regarding the difference between backlog items and user stories, we did not initially create backlog items. However, once we started working, we defined the following backlog items.

- User Authentication Login / Logout.
- Create Bin Model, CRUD Operations.
- Create User Model and CRUD Operations.
- Create Item Model and CRUD Operations.
- Create Location Model and CRUD Operations
- Create a Login page and Dashboard. BasicHTML

Backlog Item	Status	Notes
User Authentication	✅ Completed	Implemented Login, logout, and Registration
CRUD for User	✅ Completed	Developed CRUD Operations
CRUD for Bin	✅ Completed	Developed CRUD Operations
CRUD for Item	✅ Completed	Developed CRUD Operations
- CRUD for location	❌ Not Completed	This was an original User story. For this

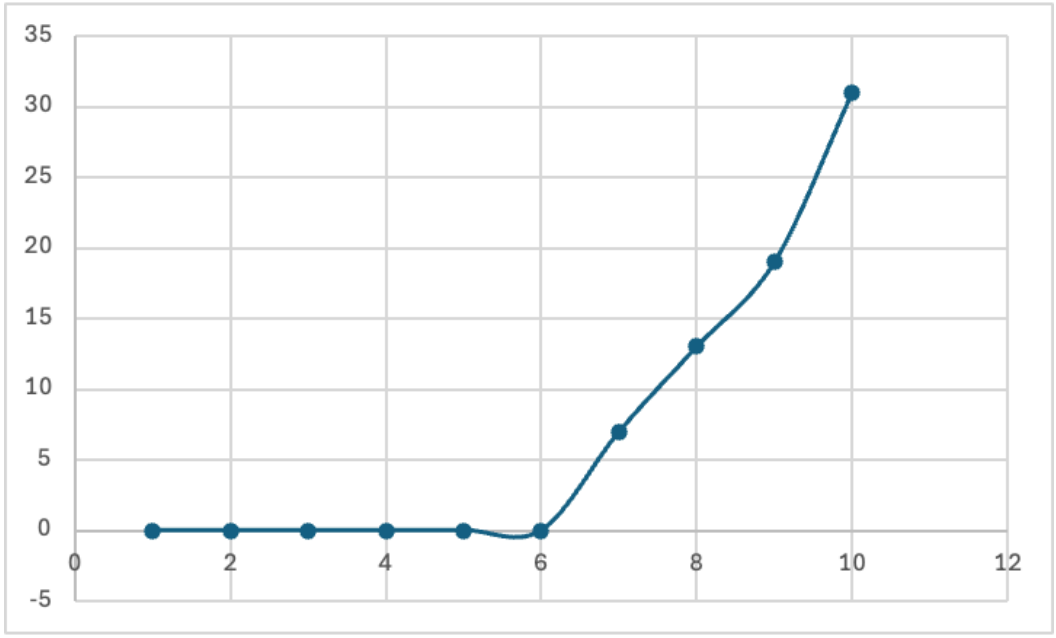
		sprint we wanted to focus on the Main models: User, Bin, Models. Planned for the next sprint
+ Create a login page and Dashboard, Simple HTML	✅ Completed	No issues. added to support User Authentication and CRUD Operations

Burn down Chart:
For Sprint #1, We didn't include the points for every user story, It will be included from now on. Nevertheless, while we were working on the sprint, we gave the user stories to following points:

- Create account for the first time and login (include all the Authentication): 5
- CRUD User: 2
- CRUD Bin: 2
- CRUD Item: 2
- Simple Dashboard: 2
- BDD for model, user, item: 2 Each
- TDD for model, user, item, Login: 3 each

Note: For the following sprints, BDD and TDD will be included in the tasks.

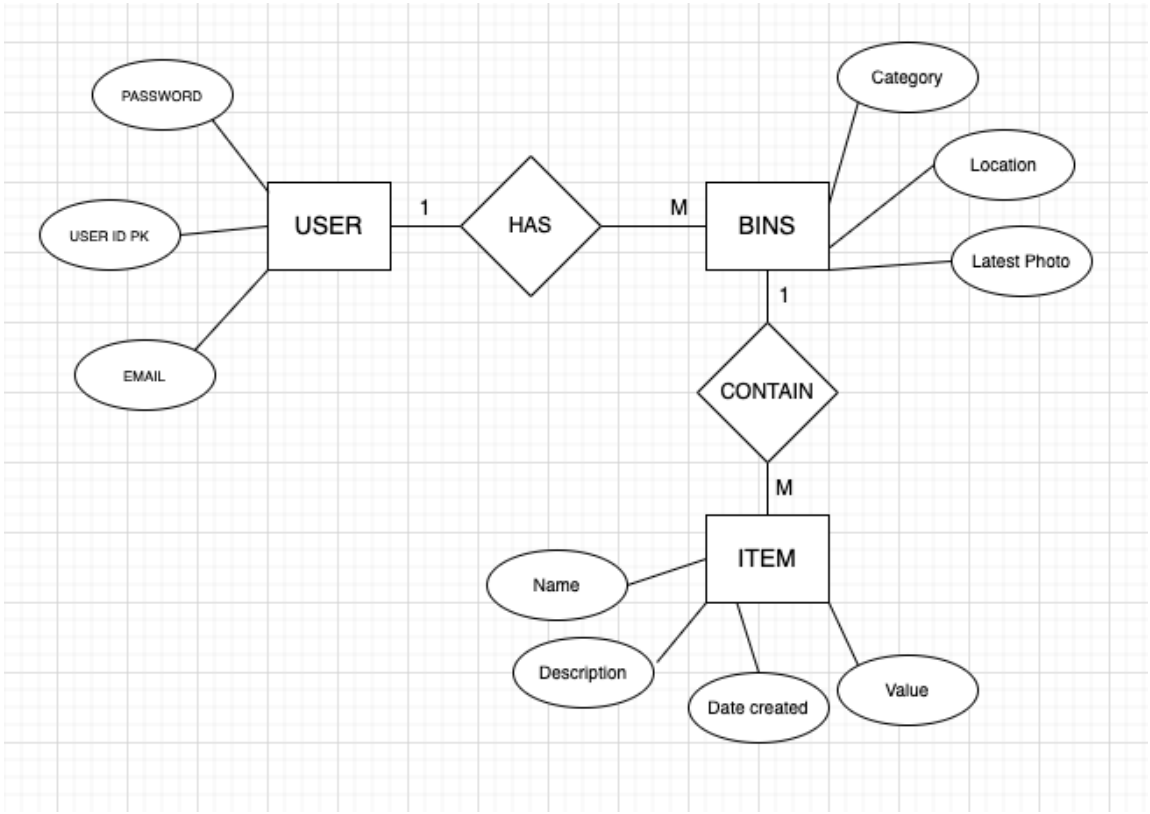
Points



Date February

Total point 31. The chart above was created using an Excel file. For Sprint #2, We will use The burn chart on Git-hub project (We were tracking the project using Slack, when we decided to switch to Git-hub project, the Issues were initialized late)

Design Diagrams:
This is the current state of the Database:



Documents of change:
Our focus in this sprint was to familiarize ourselves with Rails, and create the Main models: USER, BIN and ITEM. No change in the documentation has been implemented yet.

Cucumber Scenarios and Results:

```
Feature: User Registration and Login
  As a new user
  I want to register an account and log in
  So that I can access the system

  Scenario: Successful registration and login
    Given I am on the sign-up page
    When I fill in "Name" with "New User"
    And I fill in "Email" with "new_user@example.com"
    And I fill in "Password" with "Newpassword123!"
    And I fill in "Password confirmation" with "Newpassword123!"
    And I press "Sign Up"
    Then I should be on the login page
    When I fill in "email" with "new_user@example.com"
    And I fill in "password" with "Newpassword123!"
    And I press "Login"
    Then I should see "Welcome, New User!"
```

```
Feature: User Login
  As a user
  I want to be able to log in
  So that I can access the system

  Background:
    Given a user exists with email "rafaeldms27@icloud.com" and password "Abc1234!"

  Scenario: Successful login
    When I visit the login page
    And I fill in "email" with "rafaeldms27@icloud.com"
    And I fill in "password" with "Abc1234!"
    And I press "Login"
    Then I should see "Welcome, Rafael!"
```

```
  As a new user
  I want to register an account and log in
  So that I can access the system

  Scenario: Successful registration and login                    # features/new_user.feature:6
    Given I am on the sign-up page                               # features/step_definitions/steps.rb:33
    When I fill in "Name" with "New User"                        # features/step_definitions/steps.rb:14
    And I fill in "Email" with "new_user@example.com"            # features/step_definitions/steps.rb:14
    And I fill in "Password" with "Newpassword123!"              # features/step_definitions/steps.rb:14
    And I fill in "Password confirmation" with "Newpassword123!" # features/step_definitions/steps.rb:14
    And I press "Sign Up"                                        # features/step_definitions/steps.rb:29
    Then I should be on the login page                           # features/step_definitions/steps.rb:41
    When I fill in "email" with "new_user@example.com"           # features/step_definitions/steps.rb:14
    And I fill in "password" with "Newpassword123!"              # features/step_definitions/steps.rb:14
    And I press "Login"                                          # features/step_definitions/steps.rb:29
    Then I should see "Welcome, New User!"                       # features/step_definitions/steps.rb:37

Feature: User Login
  As a user
  I want to be able to log in
  So that I can access the system

  Background:                                                                  # features/user_login.feature:6
    Given a user exists with email "rafaeldms27@icloud.com" and password "Abc1234!" # features/step_definitions/steps.rb:1

  Scenario: Successful login                          # features/user_login.feature:9
    When I visit the login page                       # features/step_definitions/steps.rb:10
    And I fill in "email" with "rafaeldms27@icloud.com" # features/step_definitions/steps.rb:14
    And I fill in "password" with "Abc1234!"          # features/step_definitions/steps.rb:14
    And I press "Login"                               # features/step_definitions/steps.rb:29
    Then I should see "Welcome, Rafael!"              # features/step_definitions/steps.rb:37

2 scenarios (2 passed)
17 steps (17 passed)
0m0.383s
```

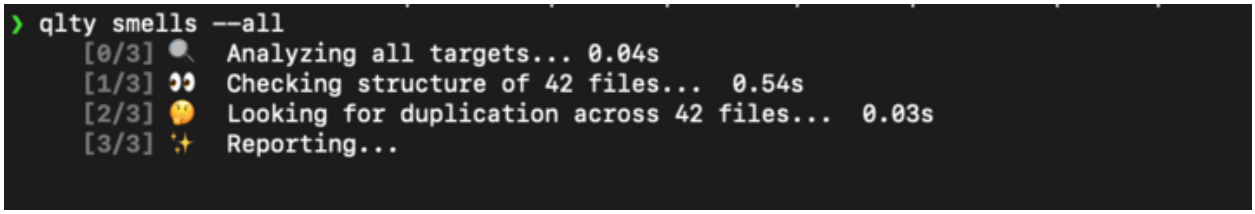
The customer Was not available to meet towards the end of sprint 1.

Evaluations of Code:

-

```
❯ qlty metrics --all --max-depth=2 --sort complexity
    [0/3] 🤔  Planning...  0.05s
    [1/3] 🔍  Analyzing files over all targets... 0.44s
    [2/3] 👀  Parsing 42 files...  0.00s
    [3/3] ✨  Reporting...
```

name	classes	funcs	fields	cyclo	complex	LCOM	lines	LOC
bin	0	12	1	46	45	0	221	143
app	12	32	10	42	25	10	353	239
app/controllers	6	29	9	24	23	9	233	169
.kamal/hooks	1	8	8	31	22	1	156	93
.kamal	1	8	8	31	22	1	156	93
lib/tasks	0	0	0	12	13	0	69	44
lib	0	0	0	12	13	0	69	44
features/step_definitions	0	0	0	5	3	0	43	37
features	0	0	0	6	3	0	72	50
app/helpers	0	1	0	7	2	0	20	20
features/support	0	0	0	1	0	0	29	13
app/javascript	0	1	1	4	0	0	23	16
app/mailers	1	0	0	1	0	0	4	4
app/models	4	1	0	4	0	1	40	28
app/jobs	1	0	0	1	0	0	7	2
app/views	0	0	0	1	0	0	26	0
TOTAL	26	92	37	228	171	22	1521	995



https://codeclimate.com/github/kxusx/123