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Scrum Project Team Portfolio

1. Project Overview

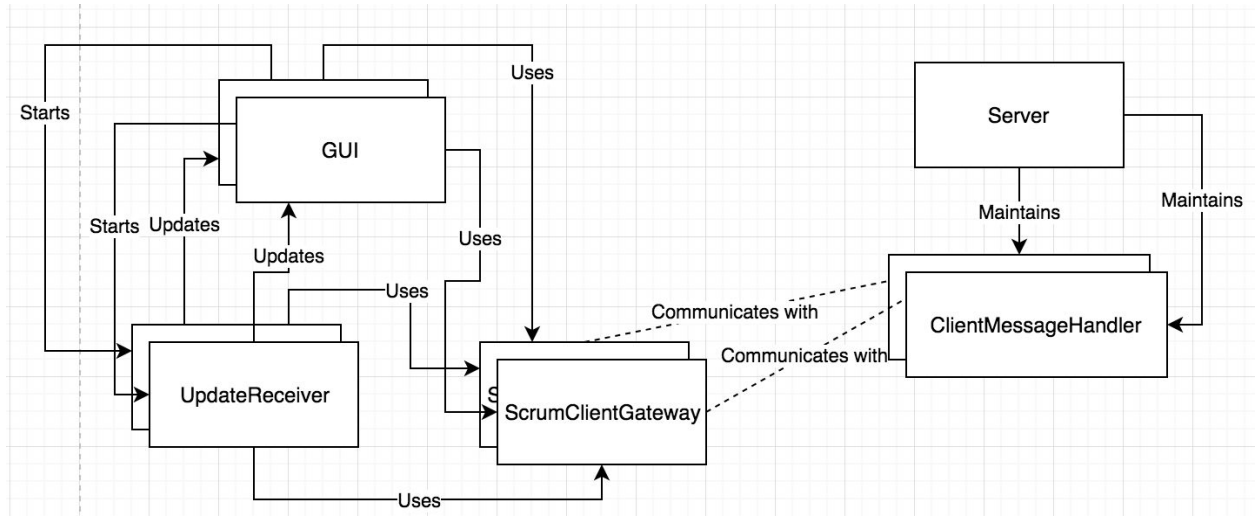
- a. The purpose of our project was to develop a collaborative SCRUM board tool that could be useful for Agile development. Our tool provides support for story creation, deletion, and modification. Stories have information such as story name, description, story points, assignee, and comments. Additionally, our project has an easy interactive interface, allowing stories to be dragged and dropped anywhere in any lane. Our SCRUM tool also allows users to see their product and sprint backlogs, and it lets them see a burndown chart detailing points vs. days in sprint. Our tool also supports a server-client system so that multiple clients can create/edit/delete stories, and updates are distributed across clients in real time. Finally, our tool maintains a persistent state, so stories will remain populated across sessions.

2. 3 User Stories

- a. Ashley Campbell
 - i. Description: Company Chief Technology Officer that requires full administrator access to the network, quality control privileges and implementation power for system upgrades.
 - ii. Points: 9
 - iii. Assignee: Nathan Rao
 - iv. Comments: Implementing server upgrades for increased efficiency.
- b. Leilani Browning
 - i. Description: Network administrator overseeing all software development for the company. She is directly involved with any and all code deployed to the network.
 - ii. Points: 6
 - iii. Assignee: Nick Rocco
 - iv. Comments: New server upgrades require development for compatibility with existing systems and external users.
- c. Pierce Brady
 - i. Description: Quality control engineer for all development on company projects.
 - ii. Points: 1
 - iii. Assignee: Steve Eisemann
 - iv. Comments: Needs heightened permissions to test user access.

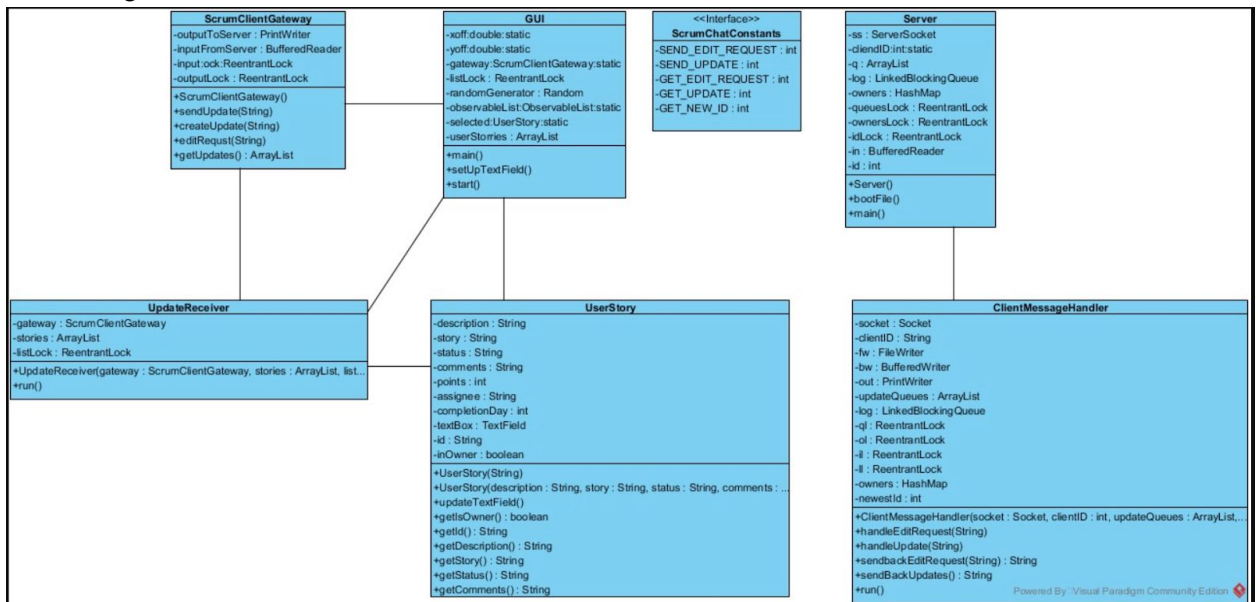
3. Fully functioning code is on GitHub at <https://github.com/seiseman/SoftwareScrumBoard>

4. Updated Architecture:



Essentially what's going on is that on the client side, we have a GUI that uses a ScrumClientGateway to connect to the server and transmit messages to the server. It also starts up an UpdateReceiver which is used to continuously poll updates (via the ScrumClientGateway) from the server and update the GUI accordingly. On the server side, upon a connection from a client, the Server starts a new ClientMessageHandler for that client to process client messages and communicate back to a ScrumClientGateway.

5. Class diagram:



6. Test plan and results:

- a. Unit Test for User Story (in repo)
 - i. Preconditions: Nothing created.
 - ii. Testing steps: Created a user story with specified parameters and checked to make sure they were as expected. Then changed the parameters and made sure that they were changed correctly.

- iii. Postconditions: One user story with changed parameters.
- iv. Results: PASS
- v. Tester: Nick Rocco
- vi. Date: December 12, 2018
- b. Integration Test for Server and Clients (in repo)
 - i. Preconditions: Created a server and two clients (as ScrumClientGateways rather than GUIs) that can talk to the server directly.
 - ii. Testing steps: Sent an update and made sure that the update I sent was the last update sent to our log. Also tried to make an edit request on the same ID with both clients and tested to make sure that only one of them could edit the story with that ID at a time.
 - iii. Postconditions: A server with updates pushed to it and two clients that can talk to the server directly by sending messages to it. Only one client is given permission to update an object, however.
 - iv. Results: PASS
 - v. Tester: Nick Rocco
 - vi. Date: December 12, 2018
- c. Acceptance Test
 - i. Preconditions: Created a server with 3 clients and created the three stories listed above in part 2. All 3 stories are in the stories lane of the SCRUM Board.
 - ii. Testing steps: Moved Ashley Campbell's story to "Done" on one client. Moved Leilani Browning's story to "Testing" on one client. Moved Pierce Brady's story to "In Progress" on one client. Deleted Pierce Brady's story on a client. Opened up a new client.
 - iii. Postconditions: Ashley Campbell's story showed up as done on all clients. Ashley Campbell's story was removed from the Product Backlog since it is done. Leilani Browning's story showed up in the testing lane on all clients. Pierce Brady's story was moved to the "In Progress" lane on all clients. The Sprint Backlog has all three stories there. The Burndown Chart has changed since there is a story in "Done". New 4th client sees that Ashley Campbell's and Leilani Browning's stories were both in the correct lane and Pierce Brady's story isn't there.
 - iv. Results: PASS
 - v. Tester: Nick Rocco
 - vi. Date: December 13, 2018