# Project 5 Team 07 SER516 - Software Agility

#### **Contributors**

1. Aditya Bajaj

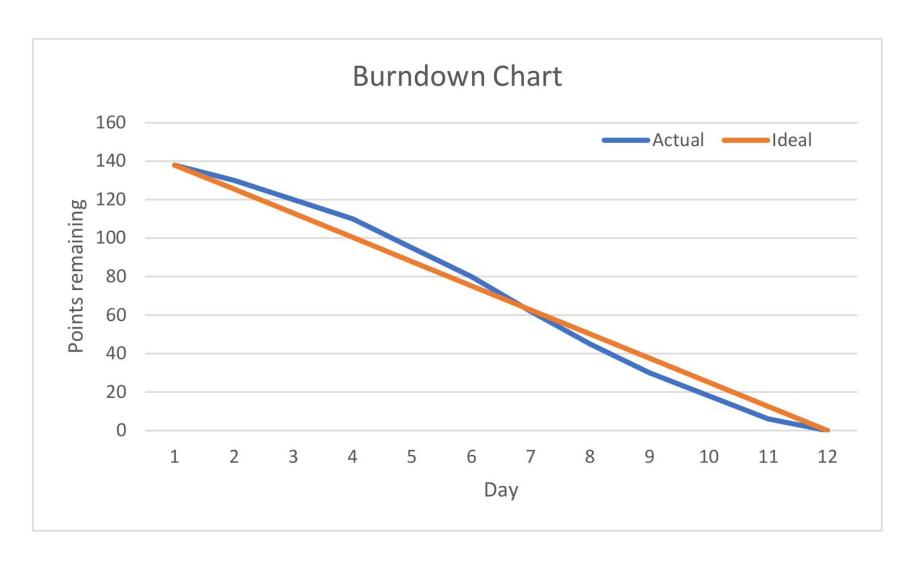
- 2. Aravind Thillai Villalan
- 3. Karandeep Singh Grewal
  - **4.** Praveen Kumar Panku

# **Product Backlog**

S. No	User Story	Acceptance Criteria	Status	Effo rts	Author
1	As a developer, I want to create a JMenuBar with an item File to create a new, open an existing & save current file, so that the user can access it.	<ol> <li>User can browse the system and create a new file, open &amp; save the file</li> <li>Tabs in the files are saved in the same order.</li> <li>Operators and Connections in the files are saved successfully.</li> <li>Operator values (stored with input popup) should be also saved.</li> </ol>	Completed	5	Aditya
2	As a developer, I want to create a JMenuBar with an item Project to compile & translate the program, so that I can solve the equation.	1. User can compile & translate the current file	Completed	3	Aditya
3	As a user, I want to use the ScrollPane, so that I can scroll & choose the operators when the screen has been resized.	1. Scrollbar should appear in LeftPanel, RightPanel & ToolBar when the MainFrame is resized to access the operators	Completed	3	Aditya
4	As a developer, I want to create a JToolBar on top containing the operators, so that I can access them.	1. Users can create operators in workspace by clicking on JToolbar items	Completed	5	Aditya
5	As a user, I want to click on on the '#' operator, so that i can create a new tab.	1. A new Tab should be created when the user creates the "#" operator	Completed	5	Aditya
6	As a user, I want to double click on the '#' operator, so that i can edit the name of the associated tab.	1. On double clicking, the associated tab name should change with the text in the input popup	Completed	8	Aditya
7	As a user, I want to use the ScrollPane, so that I can scroll & access the workspace when the screen has been resized.	1. Scrollbar should appear when the MainFrame is resized to access the operators	Completed	3	Aravind
8	As a user, I want to minimize, maximize, resize & close the MainFrame.	1. MainFrame should minimize on clicking the Minimize button 2. MainFrame should maximize on clicking the Maximize button 3. MainFrame should close on clicking the Close	Completed	2	Aravind

		button			
9	As a user, I want to translate the current tab to a graphviz file code	1. All components in the workspace should be translated to Graphviz code on clicking the Translate button.	Completed	20	Aravind
10	As a user, I want to save the workspace in the form of a graph as a graphviz file.	1. All components in the workspace should be saved as Graphviz code files with dot extension on clicking the Translate button.	Completed	5	Aravind
11	As a user, I want to drag & drop a shape from the Left Panel	1. User should be able to create new elements by dragging & dropping operators from the Left panel	Completed	5	Karandeep
12	As a user, I want to delete a connection by right clicking the connection.	1. Users should be able to delete connections between 2 operators by right clicking on the connection.	Completed	20	Karandeep
13	As a user, I want to change a connection from one operator to another operator.	1. Users should be able to change the connection between 2 operators by dragging the arrowhead to its new destination.	Completed	13	Karandeep
14	As a user, I want a log panel on the application so that I can see all the operations done in the application.	1. Users should be able to view a Log Panel at bottom to view the results of Compile & Translate functionality.	Completed	5	Karandeep
15	As a developer, I want to put all the log messages on to a log panel so that users can see the current state of the program.	1. Users should be able to view the detailed results of Compile & Translate functionality.	Completed	3	Praveen
16	As a user, I want the compiler to check that the operators and connections in all tabs are following all the rules	Checks the following rules along with rules from Sprint 4:  1. There should be an equal number of '<' and '>' operators in a tab.  2. There should not be multiple graphs in the same tab.  3. Compiler should check the rules for all tabs	Completed	20	Praveen
17	As a user, I want to delete an operator and its connections on the workspace.	1. Users should be able to delete an operator & its connections by right clicking on the operator.	Completed	13	Praveen

## **Burndown Chart**



## **Sprint Review**

- What did we do?/What do you think is the value you created this Sprint?
  - Completed all the product backlog items
  - Finished the basic features ahead of the deadline
- What could be better?
  - o Application could have been optimized more for better performance
- What will we do?
  - Extensively test our application for bugs
  - Fix any bugs if found during testing
- Would you say you met the customers' expectations? Why, why not?
  - We believe that we exceeded customer customer expectations by designing a clean & aesthetic GUI, with good performance & implemented all functionalities.

#### **Sprint Retrospective**

- What did we do well?
  - Worked on the project design and structure before starting to code
  - o GUI looks pretty good
  - Followed good coding standards
  - Used appropriate design patterns
  - o Proper code cleaning was done and good coding structure was maintained
- Did you meet your sprint goal? If not, what went wrong?
  - o Yes, we met all our sprint goals.
- Did you complete all stories on your Sprint Backlog?
  - o Yes, we completed all our user stories.
- Did you work at a consistent rate of speed, or velocity?
  - We worked consistently since the beginning, which can also be tracked by reviewing the GitHub commits.
- What should we have done better?
  - Could have increased the performance of the application
  - Lack of planning lead to some rework during the sprint
- Are there things the team thinks it can do better in the next Sprint?
  - Assigning related user stories to same person
  - Assigning user stories depending on the expertise of the person
  - $\circ$   $\;$  Reworking on the same thing for efficiency too early before integration
- What should we keep doing?
  - o Code clean up and unit testing after each major task
  - Applying appropriate design principles
  - o Try to increase the performance of the application