

Task	Details	Description	Related user story	Story points	Dependencies	Successor	Complete (Y/N)?
T1	Create database script to store questions and answer	Create a database with the following tables Question: questionId(primary key), question, answer, courseId Assignment: assignmentId(primary key), related_questionId(foreign key), courseId(foreign key) MC: questionId, choice Course: courseId(primary key) Implement UI framework for MC question and should include: - multiple choices - question description	As Henry, an instructor, I would like to be able to create and edit questions, with multiple choice questions and short answer As Henry, an instructor, I would like to be able to create and edit questions, with multiple choice questions and short answer	2	N/A	T2, T3, T4, T5, T6, T8	Y
T2	Create Multiple Choice Question UI			3	T1	T6, T7, T12, T16, T29, T30, T31, T36, T38	Y
T3	Implement Multiple Choice Question Backend	Receive question data from the UI then store MC into the database Retrieval of question data from database to send to UI Receive short answer question data from the UI then store question into the database Retrieval of question data from database to send to UI	As Henry, an instructor, I would like to be able to create and edit questions, with multiple choice questions and short answer As Henry, an instructor, I would like to be able to create and edit questions, with multiple choice questions and short answer	3	T1	T6, T7, T10, T12, T29, T30, T31, T34	Y
T4	Implement Short Answer Question Backend			3	T1	T6, T7, T10	Y
T5	Create Short Answer Question UI	Implement UI framework for short answer question and should include - text box - question description Implement UI framework for all questions that are created - this including all types of questions	As Henry, an instructor, I would like to be able to create and edit questions, with multiple choice questions and short answer As Henry, an instructor, I want to see all available questions and solutions	2	T1	T11, T12, T29, T30, T31, T36, T38	Y
T6	Create UI to view all created question			3	T3,T4	T34, T38	Y
T7	Implement UI for creating assignment (both MCQ and short answer)	Create UI for creating assignment such that user can create an assignment name and select existing questions to create the assignment. Implement backend for creating assignment such that the assignment created from UI can be stored into the database	As Henry, an instructor, I would like to create an assignment that has a name and a large set of question by selecting created questions As Henry, an instructor, I would like to create an assignment that has a name and a large set of question by selecting created for creating assignment such that user can create an assignment name and select existing questions to create the assignment	4	T1,T2,T3,T4	T8, T11, T13, T21, T22, T38	Y
T8	Implement backend for creating assignment			6	T7	T9, T11, T13, T21, T22	Y
T9	Add a page to view all created assignments	Implement UI framework for all assignments that are created - button to edit existing assignment - button to delete existing assignment	As Henry, an instructor, I would like to create an assignment that has a name and a large set of question by selecting created questions	1	T8	T11, T13, T26, T36	Y
T10	Implement UI for answering assignment questions	Create a new page so that user can answer questions on an assignment	As Tyreke, a student, I would like to have access to required assignments to work on and submit them	6	T3,T4	T26, T36	Y
T11	Add a Home Page	Add a Home Page such that user can go to following pages from the home page: - add assignment page - add question page - view assignment page	As Henry, an instructor, I would like to have a home page after I login so that I can choose what to do, e.g. create assignment/question or view existing resources	4	T5,T7,T9	T26, T36, T37	Y
T12	Add page to view a created question	Add a page such that instructor can see the question and solution he/she created	As Henry, an instructor, I want to see all available questions and solutions	2	T2,T3,T4,T5	T33, T38	Y
T13	Add page to view a created assignment	Add a page such that instructor and TA can see a created assignment Add database function to add and retrieve users and marks	As Felix, a TA, I would like to view the assignment before it is accessible to the students As Henry, an instructor, I would like to create an instructor account and the fields of entry for registration should at least include name, UTmail, program and password.	2	T7,T8,T9	T33, T38	Y
T14	Update Database for Users			3	T1	T33, T35	Y
T15	Create an instructor account in the Backend	Include implementing backend (storing new account to db) An account must have the attributes: name, UTmail, UTORid, course and password. Include implementing backend(storing new account to db) An account must have the attributes: name, UTmail, UTORid, course and password.	As Henry, an instructor, I would like to create an instructor account with full access to the system. As Shirley, a student, I would like to have a system/UI to create a student account to submit my assignments online. The fields of entry should at least include name, UTmail, student number, program, year, password	2	N/A	T25	Y
T16	Create a student account in the Backend			1	N/A	T24, T35	Y
T17	Create a TA account in the Backend	Include implementing backend (storing new account to db) An account must have the attributes: name, UTmail, UTORid, course and password. Implement instructor account registration UI The fields of entry for registration should include name, UTmail, UTORid, course and password.	As Tina, a TA, I would like to be able to create a TA account and the fields of entry for registration should at least include name, UTmail, program, student number and password As Henry, an instructor, I would like to create an instructor account and the fields of entry for registration should at least include name, UTmail, program and password.	1	N/A	T26	Y
T18	Create register page for all three users			3	N/A	T35, T36	Y

		Implement account login UI The entry fields for login should include UTmail and password.	As Tina, a TA, I would like to be able to create a TA account and the fields of entry for registration should at least include name, UTmail, program, student number and password				
T19	Create login page for all three users		As Henry, an instructor, I would like to create an instructor account with full access to the system.	3	N/A	T24, T25, T38	Y
		1. Change users.type from varchar to int 2. Add a new table user_type for user type with following columns - typeid int - userName varchar(255)					
T20	Update database script for user type	Create function to form randomized sets of questions for each student from a large set of questions for each assignment	As Patricia, an instructor, I would like to be able to quickly form randomized sets of questions for each student from a large set of questions for each assignment	0.5	T1	N/A	
T21	Generate random sets of questions for each assignment	Add visibility of assignment based on the permission	As Ali, a student, I would like to have a page where I can view all assignments in progress, completed, and upcoming with a marks summary	6	T7,T8	N/A	Y
T22	Make assignment visible to only people with the correct permission		As Henry, an instructor, I would like to be able set a due date for each assignment such that if a student does the assignment after the due date, the grade does not get counted	2	T7,T8	N/A	Y
T23	Add due date to assignment	- implement due date in the backend (in class object and database) - show due date in UI - assignment marks after due date doesn't count toward final grade	As Henry, an instructor, I would like to be able to provide permissions to users, such as TA permissions such that TA can view assignment before it is accessible to student, mark submitted assignments		N/A	N/A	Y
		Update Home page such that instructor (and only instructor) can go to					
T24	Update Home page for instructor user	- assignment setting pages (create assignment and question pages) - view all assignment page	As Tyreke, a student, I would like to view my assignment marks, and request remarks if necessary	2	T16,T19	T38	Y
T25	Update Home page for student user	Update Home page such that student (and only student) can go to - all assignment page (can be redirected to answer assignment page)	As Tyreke, a student, I would like to have access to required assignments to work on and submit them		T15,T19	T38	Y
T26	Implement backend for answering assignment questions	Update the database after user submits an assignment		3	T9,T10,T11,T17	N/A	Y
T27	Create and test acceptance tests for completed user stories	- create acceptance tests for all completed user stories - validate tests	Admin		N/A	N/A	Y
T28	Create unit tests for backend	Create unit test for databaseManager	Admin	3	N/A	N/A	Y
		Implement UI and backend so that user can edit an existing assignment which includes - update the associated questions - update the name of assignment	As Henry, an instructor, I would like to be able to edit an assignment so that I can change the due date and related questions				
T29	Edit existing assignment			1	T1,T2,T3,T4,T5	N/A	N
		Add function to delete assignment - delete can be done in view assignments page and edit existing assignment page - make sure assignment is deleted from both database and UI	As Henry, an instructor, I would like to be able to delete an assignment	1		N/A	N
T30	Delete existing assignment	Implement UI and backend so that user can edit an existing question which includes - updating any field on the question	As Henry, an instructor, I would like to be able to edit a question, with multiple choice questions and short answer	1	T1,T2,T3,T4,T5	N/A	N
T31	Edit existing question		As Henry, an instructor, I would like to be able to delete a question, with multiple choice questions and short answer	1	T1,T2,T3,T4,T5	N/A	N
T32	Delete existing question	Add function to delete question - delete should be called in view question page and edit existing question page - make sure question is deleted from both database and UI	As Henry, an instructor, I would like to be able to provide permissions to users, such as TA permissions such that TA can view assignment before it is accessible to student, mark submitted assignments.				
		Implement UI and backend for an instructor such that he can: - update permission of TA and student account such that - TA can view assignment before it is accessible to student and mark submitted assignments - Student can access the assignment - update visibility of assignment - update status of assignment such as due date and marks		6	T12,T13,T14	N/A	Y
T33	Implement instructor permissions	Currently, can only show multiple choice or short answer - not both at once. Need to add radio button functionality to make one visible and the other invisible after respective button selection	As Henry, an instructor, I would like to be able to create and edit questions, with multiple choice questions and short answer	1	T3, T6	N/A	Y
T34	Update Add Question Page UI to support both short answer and multiple choice questions	- Add a table to mock database for actual instructors ID (in reality we should be able to access the data from some school database) - Add validator so when user registers with the his utoid check if user's utoid is in the new table - if it's not in table, return an error to the register UI - if it is, then tells UI is good to go so UI can call backend to create new user entry	As Tina, a TA, I would like to be able to create a TA account and the fields of entry for registration should at least include name, UTmail, program, student number and password				
T35	Validate user type on registration			3	T14,T16,T18	N/A	N
		Update the UI so that the background is not blue or yellow	As Shirley, a student, I would like the User Interface to be accessible to visually impaired, which means the background is not blue or yellow	1	T2,T5,T9,T10,T11	N/A	Y
T36	Update UI for accessibility of the visually impaired						
T37	Review documentation	- create/edit docstrings and comments - improve code readability	Admin	3		N/A	N

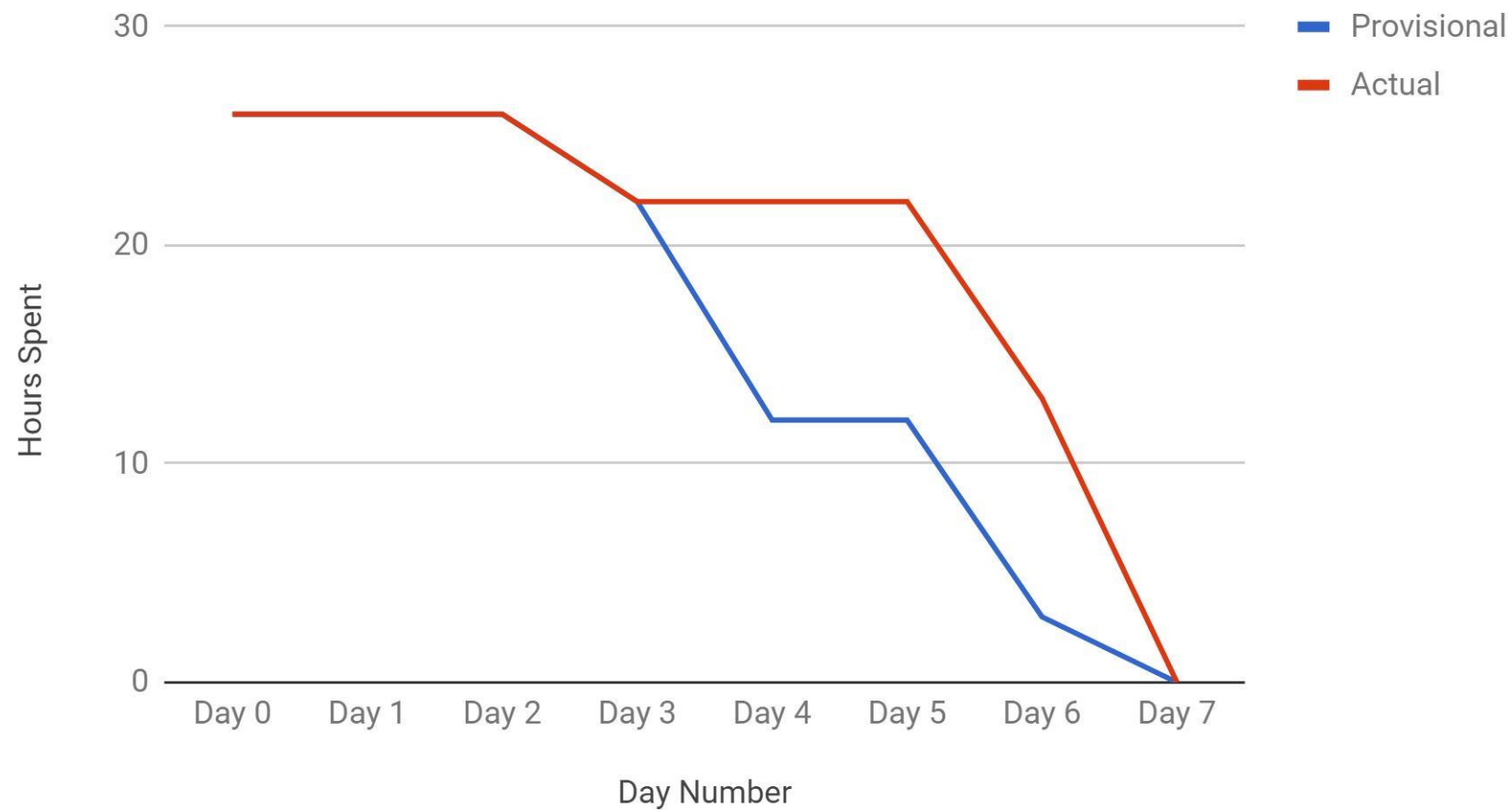
T38	Adding buttons to navigate from page to page	- buttons need to be added on login page > register page, login > student/professor				T2, T5, T6, T7, T11, T12, T13, T18, T19, T24,		
T39	Maintenace/All around improvements	- button from student's assignment > homepage > logout - button from instructor pages > homepage > logout - button from assignment details (instructor view) > assignments page Remove any redundand code and refactor duplicated code when add assignment is completed, show a message to tell user that assignment is saved sucessfully	Admin	3	T25	N/A		Y
				4	N/A	N/A		Y
T40	Add save message for adding assignment	when user registration is completed, show a message to tell user about it	As Henry, an instructor, I would like to create an assignment that has a name and a large set of question by selecting created for creating assignment such that user can create an assignment name and select existing questions to create the assignment As Henry, an instructor, I would like to create an assignment that has a name and a large set of question by selecting created for creating assignment such that user can create an assignment name and select existing questions to create the assignment	0.5	T7,T8	N/A		Y
T41	Add save message for adding user			0.5	T18	N/A		Y

SPRINT PLAN	Task	Task Points	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
	T10 (Revisited for short answer questions)	1			Adrian	1			
	T21	6		Talha	2 Talha	2 Talha	2		
	T37	3					Talha	1	Rene
	T38	3		Talha	1 Talha	1 Talha	1		
	T39	9				Adrian	2	Adrian	3
						Felicia	2 Felicia	2	
	T22	3			Felicia	3			
	T40	0.5				Felicia	0.5		
	T41	0.5				Felicia	0.5		

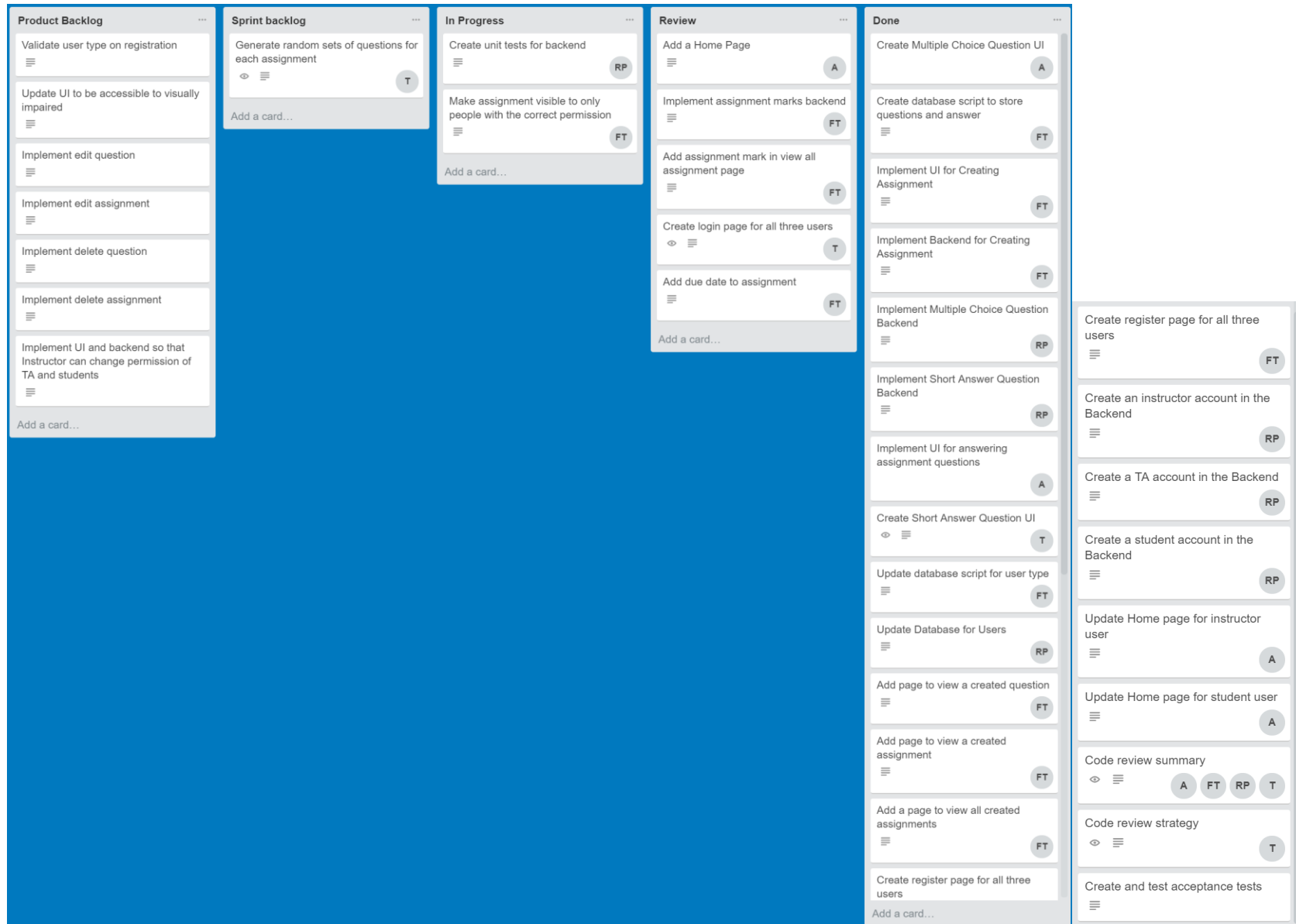
SPRINT EXEC.	Task	Task Points	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
	T10 (Revisited for short answer questions)	1			Adrian	1			
	T21	6		Talha	1 Talha	1		Talha	4
	T37	3						Rene	2 Talha
	T38	3			Talha	1 Talha	1	Talha	1
	T39	9				Adrian	3		Adrian
								Felicia	2 Felicia
	T22	3			Felicia	3			
	T40	0.5							Felicia
	T41	0.5							Felicia

BURDOW	Days	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
	Provisional	26	26	26	22	12	12	3	0
	Actual	26	26	26	22	22	22	13	0

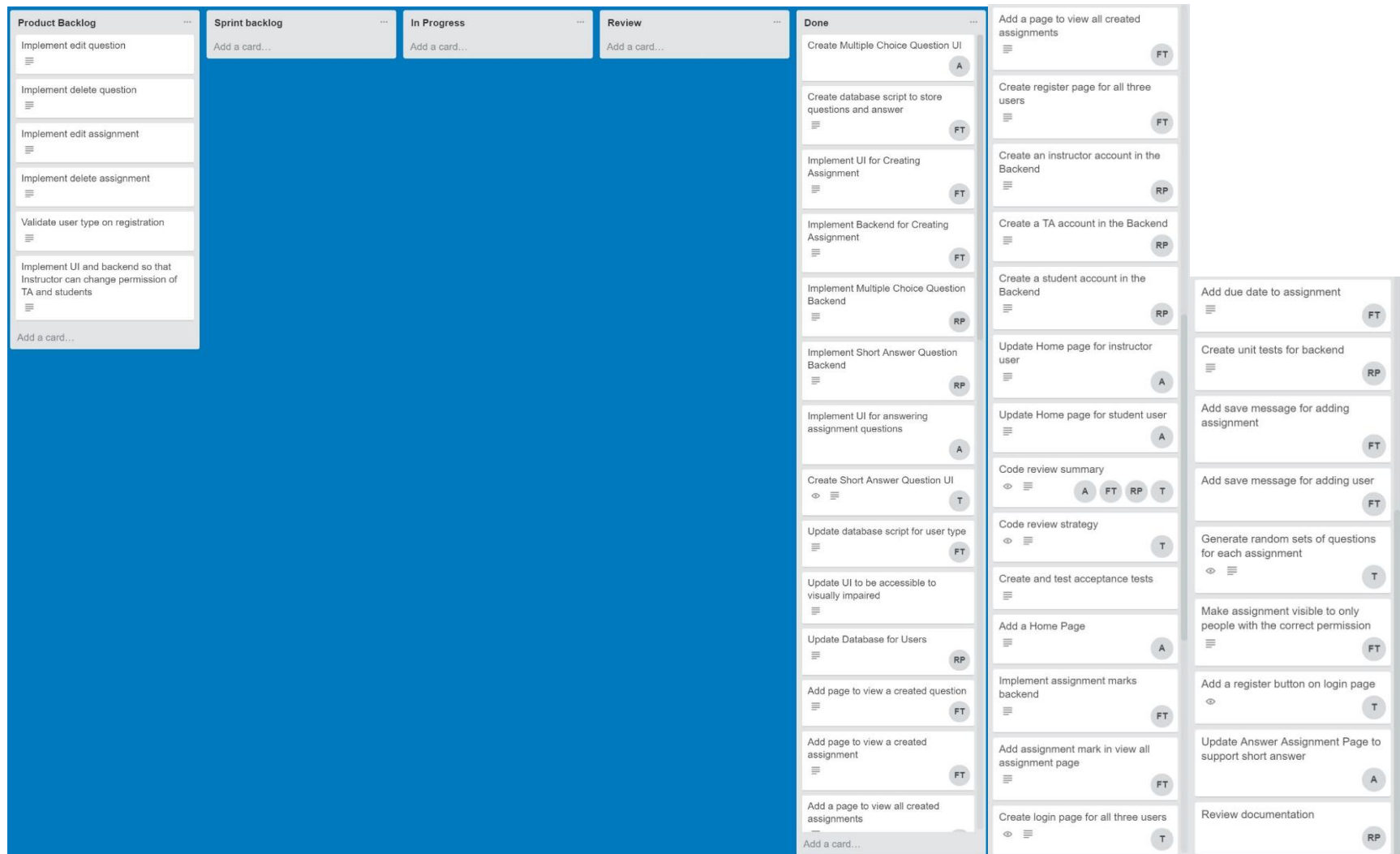
Burndown Chart (Sprint 5)



Kanban Before:



Kanban After:



What we discussed before the sprint (planning):

- Discussed about our tasks during our weekly meeting and assigned story points to the respective team member carrying out the task
- Reviewed our work of the code for the prior week and gave each other feedback

What we did during the sprint:

- Team members carried out their tasks and were properly following what their assignments were
- Any questions on the sprint would be asked on our Slack channel at any time
 - Responses were quite fast

Our final verdict from the last sprint

- Last week, the team had established that consistent work is necessary for the final week going into the project
- Every team member was aware of their responsibilities and put in significant effort to be sure that work was steady and not all left towards the end of the sprint
- Each team member was able to push their final work at least 48 hours before the final deliverable which would allow ample time for everyone to review, test, and document their code before merging their components into the development branch
- On the day of the final deliverable, team members met for a final sign-off to merge development into master and have the final product ready for presentation