Schedule Diagram and Table
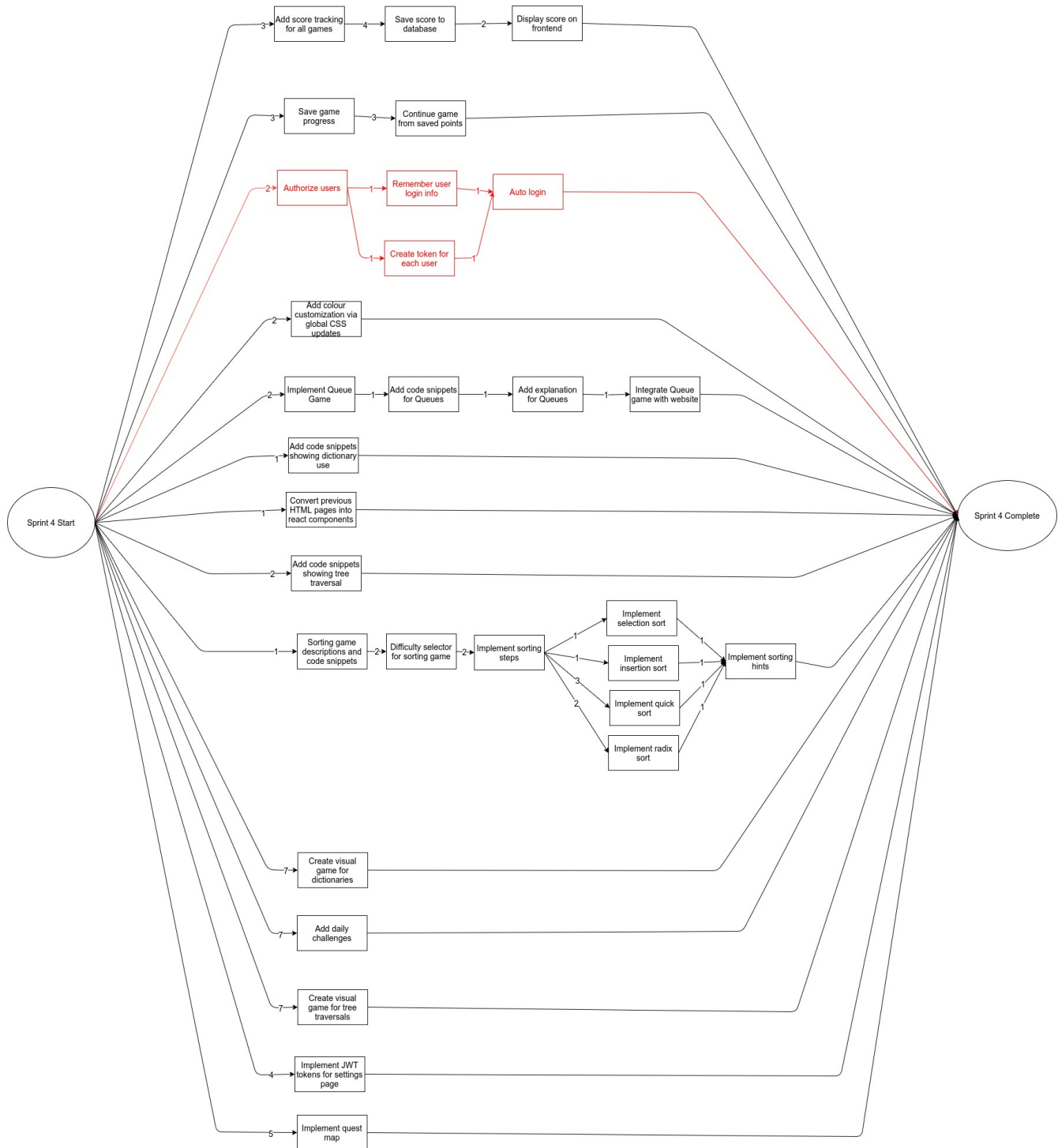
Task	Time	Dependencies	CP
Add score tracking for all games	3		
Save score to database	4	Add score tracking for all games (3)	
Display score on frontend	2	Add score tracking for all games (3), Save score to database (4)	
Save game progress	3		
Continue from saved points	3	Save game progress (3)	
Authorize users	2		*
Remember user login info	1	Authorize users (1)	*
Create token for each user	1	Authorize users (1)	*
Auto login	2	Authorize users (1), Remember user login info(1), Create token for each user (1)	*
Add colour customization via global CSS updates	2		
Implement Queue Game	2		
Add code snippets for Queues	1	Implement Queue Game (2)	
Add explanation for Queues	1	Implement Queue Game (2), Add code snippets for Queues (1)	
Integrate Queue game with website	1	Implement Queue Game (2), Add code snippets for Queues (1), Add explanation for Queues (1)	
Add code snippets showing dictionary use	1		
Convert previous HTML pages into react components	1		
Add code snippets showing tree traversal	2		
Sorting game descriptions and code snippets	1		
Difficulty selector for sorting game	2	Sorting game descriptions and code snippets (1)	
Implement sorting steps	2	Difficulty selector for sorting game (1), Sorting game descriptions and code snippets (1)	
Implement selection sort	1	Difficulty selector for sorting game (1), Sorting game descriptions and code snippets (1), Implement sorting steps (1)	
Implement insertion sort	1	Difficulty selector for sorting game (1), Sorting game descriptions and code snippets (1), Implement sorting steps (1)	
Implement quick sort	3	Difficulty selector for sorting game (1), Sorting game descriptions and code snippets (1), Implement sorting steps (1)	
Implement radix sort	2	Difficulty selector for sorting game (1), Sorting game descriptions and code snippets (1), Implement sorting steps (1)	
Create visual game for dictionaries	7		
Add daily challenges	7		
Create visual game for tree traversals	7		
Implement JWT tokens for settings page	4		
Implement quest map	5		

The network diagram and table on pages 1 and 2 represent the task breakdown for Sprint 4's user stories. The critical path in Sprint 4 involves DREAM-32 for login functionality for 4 tasks and 6 units of time. The critical path is highlighted in red in the task diagram, and marked accordingly in the table.

Although the other game features are not directly dependent on login functionality, the website as a whole requires a login. So, implementing user login is critical because most of the websites content is intended to be gated behind it, and the website would be missing a core feature without it.

Throughout the sprint, we held daily meetings to keep track of progress on all the scheduled tasks. The daily meetings also allowed us to bring up any issues we faced during the sprint so the team could collectively solve problems. The planning we did helped us accomplish the scheduled tasks and showed us whether we were on track.