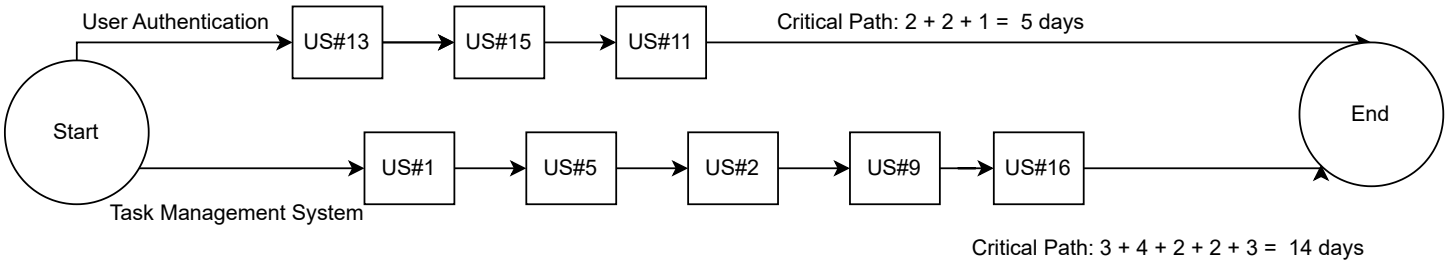
Quick Quacker Network Diagram



User Story #	Category	Duration (Days)	Dependencies
1	Task Management System	3	None
2	Task Management System	2	US#1
3	Virtual Pet Duck System	4	None
4	Virtual Pet Duck System	1	None
5	Task Management System	4	US#1
6	Virtual Pet Duck System	4	None
7	Gamification and Rewards System	2	None
8	Task Management System	3	None
9	Task Management System	2	US#1
10	Gamification and Rewards System	3	None
11	User Authentication and Account Management	1	US#13
12	Gamification and Rewards System	2	None
13	User Authentication and Account Management	2	None
14	Virtual Pet Duck System	2	None
15	User Authentication and Account Management	2	US#13
16	Task Management System	3	US#1
17	Virtual Pet Duck System	1	None
18	Gamification and Rewards System	3	None
19	User Interface	3	None
20	User Interface	3	None

Explanation:

The network diagram shows two main workflow, both of which have dependencies.
The first is user authentication where users can sign up (US#13), login (US#15) and logout (US#11).
The second flow is task management where users can add tasks (US#1), create and edit tasks (US#5), organize tasks (US#2), prioritize tasks (US#9), and set task difficulty (US#16).

All of these tasks are connected. The critical path determines the longest sequence of dependent tasks. It will show the minimum time needed to complete the project. It is computed by adding all the duration days of each user story. Based on the critical path, the task management system is the most time-consuming part of the project.

In order to keep our sprint in schedule, we will prioritize the critical path tasks. Since it will take up the most time, we will focus on these user stories first.