

Project Planning

- **Estimated Duration:** 1.5 Weeks
- **Expected Duration:** 3 Weeks
- **Start Date:** 5/08/2023
- **End Date:** 5/29/2023

The estimated duration was calculated using the Function Point method, using the following values:

Function Category	Count	Simple	Average	Complex	Count x Complexity
User Input	55	3	4	6	165
User Output	49	4	5	7	196
User queries	4	3	4	6	16
Data Files/Relational Tables	1	7	10	15	7
External Interfaces	5	5	7	10	35
					419

PCA = 1.06

Function Point = 444.14 FP

Estimated Effort = $444.14 / 60 = 7.4 \approx 7$ person weeks

Duration = $7 / 5 = 1.4$ weeks ≈ 1.5 weeks

PCA value was determined using various assertions:

- Data requirements are significant to the system, which includes the system being reliable as well as communication between the client and the server.
- Internal processing needs to be efficient, as the database may grow large.
- Generally, user experience needs to be smooth enough, but performance is also not a critical aspect of the system.

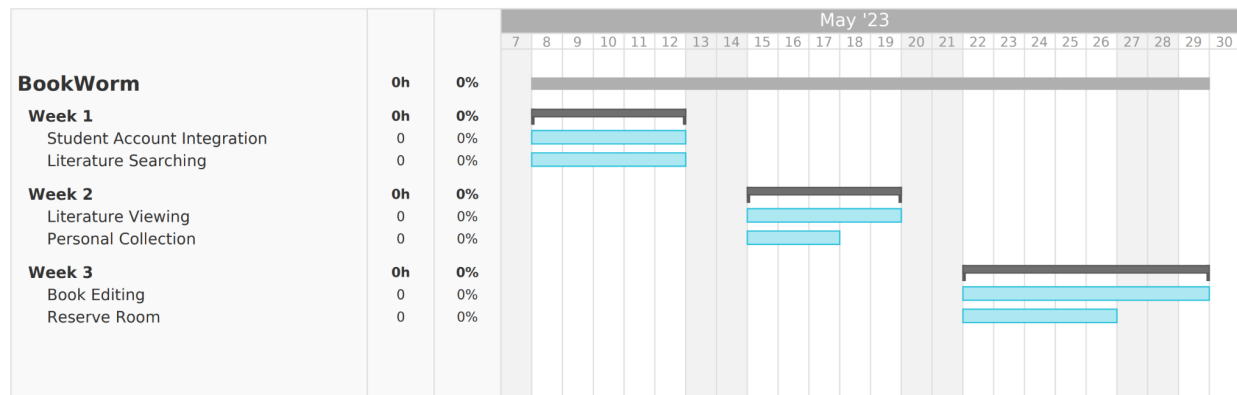
- Installation is not necessary, as this is purely a web application and therefore doesn't affect our project

Other Important Factors:

- The development team is inexperienced, hence the expected duration is longer than the estimated duration.
- Because the development team is inexperienced, the duration of the project has been extended to account for learning the systems and tools that the team will be working with, as well as the bugs and fixes that will be encountered along the way.
- Development time will only account for work done on the weekdays, and not weekends.
- Each developer will be required to work for 8 hours a day on each weekday.

Items to Implement With Estimated Implementation Duration

- Student Account Integration (3 to 5 days)
- Literature Searching (3 to 5 days)
- Literature Viewing (3 to 5 days)
- Personal Collection (2 to 3 days)
- Book Editing (5 to 6 days)
- Student Room Reservation (3 to 5 days)



Scheduling Notes

- Students must be able to search for the literature before they are able to view it or add it to their collection. Those items must be completed sequentially.
- Students must be able to view the literature before they can edit it. Those items must be completed sequentially.
- Account Integration and Room reservation can be completed in parallel with any other task, so those tasks are flexible.