

Project Status Report

JPL Parallel SPICE Implementation

As of 03/29/2021

Project Status Summary

Percent Complete: 0%

	Scope	We have had no issues with the scope of the project
	Schedule	We are on schedule
	Quality	The codebase quality is currently satisfactory
	Issues	No current outstanding issues

Work Planned For Last Week

- Improve parSPICE performance

Work Planned For This Week

- Test new solution design
- Benchmark new design
- Document new design

Open Issues

- We have restructured our project to greatly improve performance. This means scrapping most of the work that we have done up to this point. Since previous performance metrics were dismal, this isn't really a significant loss except for the amount of time spent on the original implementation.
- The new design is much simpler, hopefully we can turn it into a finished product in the time remaining

Deliverables and Milestones

Milestone	Planned	Forecasted	Actual	Status
Understand SPICE in a Java Context	10/12/2020	10/19/2020	10/19/2020	100%
Understand the scope of the project	10/12/2020	10/19/2020	10/19/2020	100%
Develop a preliminary design for parallelizing SPICE functions in Java	10/12/2020	02/12/2021	-	100%
Automating the coverage of the SPICE Library	01/25/2021	03/05/2021	-	50%
Deliverable	Planned	Forecasted	Actual	Status
Create a requirements document	10/19/2020	10/19/2020	10/19/2020	100%
Create a design document	10/19/2020	03/05/2021	-	45%
Develop a preliminary prototype of the user-side of ParSPICE	11/02/2020	02/12/2021	-	80%
Develop a preliminary prototype of the engine-side of ParSPICE	11/02/2020	02/12/2021	-	80%
Develop a prototype of ParSPICE with both the client-side and engine-side components	01/24/2021	03/12/2021	-	50%

Key Performance Indicators

- **Schedule** - Project is on Schedule
 - Schedule Variance (SV): +/- 14 days