

Project Status Report

JPL Parallel SPICE Implementation

As of 10/05/2020

Project Status Summary

Percent Complete: 0%

Scope	With a good understanding of JNISpice and GRPC, we should have a good idea of our scope after our weekly standup on Tuesday.
Schedule	Our weekly team meetings suggest that our understanding of SPICE and potential solutions are steadily progressing.
Quality	There have been no quality issues thus far.
Issues	There is still no concrete scope for the project, but the team has a better grasp of the requirements and the team will discuss and decide on a formal sense of scope this week.

Work Planned For Last Week

- Develop example programs that calls SPICE functions in Java
 - Get an example program with multiple SPICE functions on the GitHub repository
 - Understand the function types that SPICE uses
- Research methods of parallelizing functions in Java
 - Develop a simple ZeroMQ prototype program
 - Develop a simple GRPC prototype program

Work Planned For This Week

- Develop a requirements document
 - The research we did on the various libraries we are working with gave us a good context to understand the requirements of our task
- Start on the design document
 - Along with the requirements document we would like to start an outline along with discussions of our design document

- Our team is all on the same page on the general idea of the solution we want to produce. Translating our thoughts into a formal design document would be the next step to flesh out our ideas and fill any gaps in our understanding.

Open Issues

- Team operations have still been smooth

Deliverables and Milestones

Milestone	Planned	Forecasted	Actual	Status
Understand SPICE in a Java Context	10/12/2020	10/19/2020	-	90%
Develop a preliminary design for parallelizing SPICE functions in Java	10/12/2020	10/26/2020	-	25%
Understand the scope of the project	10/12/2020	10/19/2020	-	15%
Deliverable	Planned	Forecasted	Actual	Status
Create a requirements document	10/19/2020	10/19/2020	-	75%
Create a design document	10/19/2020	10/19/2020	-	10%
Develop a preliminary prototype of ParSPICE	11/02/2020	11/02/2020	-	0%

Open Change Requests

- None thus far

Key Performance Indicators

- **Schedule** - Project is on Schedule
 - Schedule Variance (SV): +/- 7 days