

Project Status Report

JPL Parallel SPICE Implementation

As of 11/1/2020

Project Status Summary

Percent Complete: 0%

Scope	We finally have a good, team wide understanding of the scope and are on track working towards our end goal.
Schedule	Spice and Gradle is springing up issues that are currently thanking longer than expected to solve
Quality	There have been no quality issues thus far.
Issues	Road block with Spice and Gradle.

Work Planned For Last Week

- Design a method for the marshaling of grpc calls to spice lib calls
 - Finnish preliminary prototype of function call marshaller
- Get a workerPool prototype working
 - There is a workerPool example in the Github repository of a workerPool in C#
 - Porting it to Java would be helpful
- Design useful benchmarks
- Work on design document
 - Completed outline of user code

Work Planned For This Week

- Mainly a continuation of tasks from last week
 - Design a method for the marshaling of grpc calls to spice lib calls
 - Get a workerPool prototype working
 - Design useful benchmarks
 - Work on design document

Open Issues

- Getting Gradle to work with the JNISPice Library is taking longer than expected

Deliverables and Milestones

Milestone	Planned	Forecasted	Actual	Status
Understand SPICE in a Java Context	10/12/2020	10/19/2020	10/19/2020	100%
Develop a preliminary design for parallelizing SPICE functions in Java	10/12/2020	11/16/2020	-	35%
Understand the scope of the project	10/12/2020	10/19/2020	10/19/2020	100%
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	11/16/2020	-	25%
Develop a preliminary prototype of ParSPICE	11/02/2020	11/23/2020	-	05%

Open Change Requests

- None thus far

Key Performance Indicators

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