

Project Status Report

JPL Parallel SPICE Implementation

As of 10/18/2020

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	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	No issues occurred last week

Work Planned For Last 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.
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Work Planned For This Week

- Design a method for the marshaling of grpc calls to spice lib calls
 - Design a potential method, via UML, for passing Spice calls via grpc
 - Get a preliminary prototype of such
- 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
- Work on design document

- Further work on the design document

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	10/19/2020	100%
Develop a preliminary design for parallelizing SPICE functions in Java	10/12/2020	10/26/2020	-	35%
Understand the scope of the project	10/12/2020	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	10/26/2020	-	25%
Develop a preliminary prototype of ParSPICE	11/02/2020	11/02/2020	-	05%

Open Change Requests

- None thus far

Key Performance Indicators

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