Project Final Report

University of Alberta – CMPUT 401 – Winter 2013 – BioMembranes

# Overview

This document contains an overview of progress in the Biomembranes Image Correlation Spectroscopy project, and how the end result differed from our original project proposal.

# Product Backlog Progress

**Prototype Sprint**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task | Story Points | Assigned To | Completed By | Delta\* |
| Backend – Python Conversion (without Triple Correlation) | 3 | Omar | Omar | 0 |
| Backend – Python Conversion (with Triple Correlation) | 3 | Omar | Omar | 0 |
| Backend – Command Line Interface | 0.5 | Glen | Glen | 0 |
| Acceptance Tests – Part 1 | 5 | Glen | Glen | 0 |
| Requirements Document – Resources | 1 | James | James | 0 |
| Requirements Document – Glossary | 0.5 | Everyone | Everyone | 0 |
| Requirements Document – IP License | 1 | Glen | Glen | 0 |
| Requirements Document – Storyboard | 3 | Nick | Nick | 0 |
| Requirements Document – Requirements | 1 | Cameron | Cameron | 0 |
| Requirements Document – Overview | 3 | Richard | Richard | 0 |
| Project Plan – Personal Logs | 0.5 | Everyone | Everyone | 0 |
| Project Plan – Major Phases / Milestones | 3 | Glen, James | Glen, James | 0 |
| Project Plan – Project Macrostructure | 3 | Nick | Nick | 0 |
| Project Plan – Risk Assessment | 1 | Omar | Omar | 0 |
| Project Plan – Introduction | 1 | Nick | Nick | 0 |

*\* Note: the Sprint Delta shows how many sprints ahead or behind the task was completed. So if the task was delayed by 1 sprint, this will be -1; if it was ahead by 2 sprints, it will be +2; if it was completed during the expected sprint, it will be 0.*

**Webpage Sprint**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task | Story Points | Assigned To | Completed By | Delta\* |
| Web – Django Models | 3 | Cameron | Cameron | 0 |
| Web – Upload Form | 1 | Richard | James, Cameron | -1 |
| Web – Queue and Run Task | 3 | Cameron | Cameron | 0 |
| Web – Display Results | 3 | James | James | -2 |
| Web – ICS Program View | 3 | James | James | 0 |
| Backend – Refactor Initial Prototype/Proof of Concept | 0.5 | Omar | Omar | 0 |
| Backend – Add Unit Tests | 3 | Omar, Glen | Omar, Glen | 0 |
| Backend – Add Image Formats | 3 | Omar, Glen | Omar, Glen | 0 |
| Backend – Add support for channel separated images | 0.5 | Cameron | Cameron | 0 |
| Local GUI – Load Images | 1 | Richard | Nick | -1 |
| Local GUI – Basic GUI in place | 3 | Nick | Nick | 0 |
| Local GUI – Call the backend | 1 | Nick | Nick | -1 |
| Local GUI – Display results | 1 | Richard | Nick | -2 |
| Integration Tests Part 1 | 3 | Glen | Glen | -1 |
| Requirements Technical Review – Findings Report | 5 | Everyone | Everyone | 0 |
| Requirements Technical Review – Meetings | 1 | Everyone | Everyone | 0 |
| Update Documentation | 1 | Nick | Nick | 0 |

**Batch Sprint**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task | Story Points | Assigned To | Completed By | Delta\* |
| Backend – Batch Processing | 8 | Glen, Cameron | Omar | 0 |
| Web – Batch Processing View | 8 | James, Richard | James | -1 |
| GUI – Batch Processing | 8 | Omar, Nick | Nick | -1 |
| Acceptance Tests Part 2 | 5 | Glen | Glen | 0 |
| Requirements Technical Review – Repair | 3 | Nick, Richard | Nick, Richard | 0 |
| Update Documents | 1 | Nick | Nick | 0 |

**Completion Sprint**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task | Story Points | Assigned To | Completed By | Delta\* |
| Backend – Profiling | 5 | Omar | Omar | +1 |
| Backend – Complete | 3 | Glen, Omar | Glen | 0 |
| Web – Complete | 3 | James, Cameron | James, Cameron | 0 |
| GUI – Complete | 3 | Nick | Nick | 0 |
| Acceptance Test Document – Installation Document | 3 | Glen | Glen | 0 |
| Acceptance Test Document – System Tests | 3 | Glen | Glen | 0 |
| Acceptance Test Document – Support Contact | 1 | Glen | Glen | 0 |
| User Manual – Online | 3 | Omar, Richard, Nick | James, Cameron | 0 |
| User Manual – Offline | 3 | Richard, James, Cameron | Nick, James, Cameron | 0 |
| Presentation – Video | 1 | Cameron | Cameron | -1 |
| Presentation – Product Overview | 0.5 | Richard | Nick, Richard | 0 |
| Presentation – Example User Scenarios | 0.5 | Nick | Richard, Nick | -1 |
| Presentation – Chosen Architecture | 0.5 | James | Richard | -1 |
| Presentation – Implementation Challenges | 0.5 | James | Nick, Richard | 0 |
| Presentation – Management Challenges | 0.5 | Omar | Nick, Richard | 0 |
| Presentation – Lessons Learned | 0.5 | Omar | Nick, Richard | 0 |
| Future Work Document – Dropped Features | 0.5 | James | Nick | -1 |
| Future Work Document – Non-Functionality | 1 | Nick | Nick | -1 |
| Future Work Document – Lessons Learned | 0.5 | Cameron | Nick | -1 |

**Docs & Demo Sprint**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task | Story Points | Assigned To | Completed By | Delta\* |
| Architecture – Software Subsystems | 3 | Richard, Cameron | Richard, Cameron | 0 |
| Architecture – Logical Model | 5 | Omar, Nick, James | Omar, Nick, James | 0 |
| Architecture – Dynamic Behaviors | 0.5 | Glen | Glen | 0 |

# Story Point & Hours Analysis

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sprint | Expected Story Points | Actual Story Points | Completed Story Points | Team Hours | Points per Hour |
| Prototype Sprint | 29.5 | 29.5 | 29.5 | Untracked |  |
| Webpage Sprint | 33 | 36 | 26 | 52 | 0.50 |
| Batch Sprint | 33 | 43 | 28 | 122 | 0.23 |
| Profiling Sprint | 37 | 56 | 0 | 0 |  |
| Completion Sprint | 29.5 | 85.5 | 81 | 162 | 0.50 |
| Docs & Demo Sprint | 8.5 | 8.5 | 8.5 | Untracked |  |

**Burn-Down Chart**

**Hours per Member per Sprint**

**Story Points per Member per Sprint**