

# Team Decided – Raft Consensus

Inception Iteration Plan 3 - Starting 09/04/2018

## 1. Key Milestones

| Milestone   | Date       |
|---|------------|
| Iteration Start   | 09/04/2018 |
| Complete the Initial Requirement Model                        | 14/03/2018 |
| Write the Master Test Plan                                    | 14/03/2018 |
| Compile section below into submittable document               | 14/04/2018 |
| Write an Inception Phase Status Assessment                    | 14/04/2018 |
| Complete quality review of document                           | 14/04/2018 |
| Complete design/diagramming/TDD for RaftNetworking + Security | 21/04/2018 |
| Complete design/diagramming/TDD for Raft-DistributedLog       | 21/04/2018 |
| Complete design/diagramming/TDD for Raft-NodeInfo             | 21/04/2018 |
| Complete design/diagramming/TDD for Raft-Messages             | 21/04/2018 |
| Complete design/diagramming for Raft Consensus + API          | 21/04/2018 |
| Iteration End   | 23/04/2018 |

## 2. High-level Objectives

| ID | Objective   | Date       |
|----|---|------------|
| 1  | Complete the Initial Requirement Model                        | 14/03/2018 |
| 2  | Write the Master Test Plan                                    | 14/03/2018 |
| 3  | Compile section below into submittable document               | 14/04/2018 |
| 4  | Write an Inception Phase Status Assessment                    | 14/04/2018 |
| 5  | Complete quality review of document                           | 14/04/2018 |
| 6  | Complete design/diagramming/TDD for RaftNetworking + Security | 21/04/2018 |
| 7  | Complete design/diagramming/TDD for Raft-DistributedLog       | 21/04/2018 |
| 8  | Complete design/diagramming/TDD for Raft-NodeInfo             | 21/04/2018 |
| 9  | Complete design/diagramming/TDD for Raft-Messages             | 21/04/2018 |
| 10 | Complete design/diagramming/TDD for Raft Consensus + API      | 21/04/2018 |

### 3. Evaluation Criteria

| Obj. ID | Evaluation Criteria   |
|---------|---|
| 1       | Complete the Initial Requirement Model                        |
| 2       | Write the Master Test Plan                                    |
| 3       | Compile section below into submittable document               |
| 4       | Write an Inception Phase Status Assessment                    |
| 5       | Complete quality review of document                           |
| 6       | Complete design/diagramming/TDD for RaftNetworking + Security |
| 7       | Complete design/diagramming/TDD for Raft-DistributedLog       |
| 8       | Complete design/diagramming/TDD for Raft-NodeInfo             |
| 9       | Complete design/diagramming/TDD for Raft-Messages             |
| 10      | Complete design/diagramming/TDD for Raft Consensus + API      |

## 4. Work Item Assignments

State:

C – Complete

P – In Progress

W – Waiting to start

| Work ID | Name or keywords  | Outcome                                 | State | Assigned to | Est (hrs) | Act (hrs) | Left (hrs) |
|---------|---|---|-------|-------------|-----------|-----------|------------|
| 1.1     | Complete the Initial Requirement Model                        | Complete                                | C     | Joshua      | 6:00      | 3:00      | 0:00       |
| 2.1     | Write the Master Test Plan                                    | Complete                                | C     | Sean        | 10:00     | 4:00      | 0:00       |
| 3.1     | Compile section below into submittable document               | Complete                                | C     | Sean        | 1:00      | 2:00      | 0:00       |
| 4.1     | Write an Inception Phase Status Assessment                    | Complete                                | C     | Sean        | 4:00      | 8:00      | 0:00       |
| 5.1     | Complete quality review of document                           | Complete                                | C     | Joshua      | 1:00      | 0:30      | 0:00       |
| 6.1     | Complete design/diagramming/TDD for RaftNetworking + Security | Completed all but the TDD               | P     | Sean        | 4:00      | 8:00      | 6:00       |
| 7.1     | Complete design/diagramming/TDD for Raft-DistributedLog       | Completed all but the TDD               | P     | Joshua      | 2:00      | 4:00      | 2:00       |
| 8.1     | Complete design/diagramming/TDD for Raft-NodeInfo             | Completed all but the TDD               | P     | Sean        | 2:00      | 4:00      | 2:00       |
| 9.1     | Complete design/diagramming/TDD for Raft-Messages             | Completed all but the TDD               | P     | Joshua      | 2:00      | 4:00      | 4:00       |
| 10.1    | Complete design/diagramming/TDD for Raft Consensus + API      | Outlined API, but only at draft quality | P     | Sean        | 4:00      | 0:30      | 8:00       |
| Totals  |   |   |       |             | 36:00     | 38:00     | 22:00      |

## 5. Issues

| Issue  | Status | Notes  |
|--|--------|--|
| Cannot complete Requirement Model, do not understand instructions. | Closed | Discussed with Jim, this cleared it up the issues we had, were able to complete document   |
| Master Test Plan - We do not understand how to write the document  | Closed | Discussed with Jim, this cleared it up the issues we had, were able to complete document   |
| Did not complete desired amount of work in timeframe               | Closed | After getting the extension from Jim, we were able to complete LCOM within the extension period  |
| Designing Networking took us far longer than expected              | Closed | One of those things we cannot project, so we'll just have to be less optimistic in the future and appreciate the depth of tasks we are unfamiliar with |
| Did not think of Logging, so we had to design a wrapper for that   | Closed | We had to look into NUnit and design a wrapper which would be logging framework agnostic for Raft.   |
| Continued underestimating the amount of time tasks take            | Open   | Failed to estimate how long designing/diagramming/TDD of the various Raft component would take. Did not complete Raft itself, or any TDD.              |

## 6. Assessment

|                                      |   |               |
|--------------------------------------|---|---------------|
| <b>Assessment target</b>             | Inception Iteration 3   |               |
| <b>Assessment date</b>               | 23/04/2018  |               |
| <b>Participants</b>                  | All - Joshua and Sean   |               |
| <b>Project status</b>                | Orange  |               |
| <b>Assessment against objectives</b> | <b>Objective</b>  | <b>Result</b> |
|                                      | Complete the Initial Requirement Model                        | Complete      |
|                                      | Write the Master Test Plan                                    | Complete      |
|                                      | Compile section below into submittable document               | Complete      |
|                                      | Write an Inception Phase Status Assessment                    | Complete      |
|                                      | Complete quality review of document                           | Complete      |
|                                      | Complete design/diagramming/TDD for RaftNetworking + Security | In Progress   |
|                                      | Complete design/diagramming/TDD for Raft-DistributedLog       | In Progress   |
|                                      | Complete design/diagramming/TDD for Raft-NodeInfo             | In Progress   |
|                                      | Complete design/diagramming/TDD for Raft-Messages             | In Progress   |
|                                      | Complete design/diagramming/TDD for Raft Consensus + API      | In Progress   |
| <b>Work items</b>                    |   |               |
| <b>Other concerns and deviations</b> |   |               |