**Anodiam**

**Agile Process Doc**

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| **Version** | **Editor** | **Reviewer** | **Date** | **Note** |
| 1.0 | AC |  | 18/06/2020 | Initial version |
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1. Why is Agile best suited for Anodiam?

* Well defined, structured framework
* Agile manages scope, time, cost and quality efficiently.
* Light, efficient, effective and consistent. It minimizes waste.
* Collaborative, self organized, cross functional team work.
* Value is optimized, rapid, responsive,  adaptive, feature-driven, test-based.
* Iterative, empirical, accurate.
* Reduces the overall risks well.
* Transparency, inspection, adaptation.
* Commitment, courage, focus, openness, respect.
* Competitive, prioritized product features.
* Individuals and interactions over processes and tools.
* Working software over comprehensive documentation.
* Customer collaboration over contract negotiation.
* Responding to change over following a plan.

1. Anodiam’s definition of DONE

Following needs to be complete for all tasks of a product backlog item (user story, feature or enabler) before it is considered “Done”.

1. Code developed, unit tested and all unit test cases passed.
2. Code reviewed and all review comments closed.
3. Code tested with automated and manual test cases. All test cases passed, including System, Integration, Regression, Performance and other required NFR Tests.
4. Acceptance test criteria fulfilled with no open bugs.
5. Feature released in pre-production environment with smoke test passed.

There can only be up to a maximum of one low priority (P4 or P5) known issue left per product backlog item. In that case, the known issue has to be well documented and fed back into the product backlog before the item is considered “Done”.

1. Sprint, Release and Product Increment

Release process for product increments (features or enablers) in the Anodiam project will be done through Continuous Integration and Continuous Delivery. Though, Continuous Deployment options will be considered at a later and matured stage. The guidelines for the release process will be as follows:

1. Release will be done at the end of every sprint.
2. Therefore the terms ‘release’ and ‘sprint’ will be synonymous for the Anodiam project.
3. The product increment will be delivered to pre pre-production environment through an automated CI/CD pipeline.
4. The product will be manually deployed to the production environment from the pre-production environment as per business requirements.
5. Separate business decisions and planning will be required for production deployment and release.
6. Release Process (TDD, CI/CD)

Release process for product increments (features or enablers) in the Anodiam project will be automated to a considerable extent. Continuous Integration and Continuous Delivery will be implemented. Continuous Deployment options will be considered at a later and matured stage.

Test Driven Development (TDD) methodology will be used to ensure the highest possible quality of the delivery.

The guidelines for the constituent stages, as of now, will be as follows:

1. **TDD** Initiation: Test Driven Development to be followed as the basis of all product increments. Following are required to initiate any release cycle.
   1. **Acceptance criteria** defined for the product increment.
   2. **Manual Test Cases** for following testingto be developed by the testers in accordance with the acceptance criteria.
      1. System Testing.
      2. Integration Testing.
   3. **Automation Test Scripts** to be developed by the testers in accordance with the acceptance criteria.
   4. **Manual Code Review Criteria** defined by peer developer.
   5. **Automated Code Review Criteria** developed by peer developer.
2. **Development** will be done on the developer’s desktop. Following steps will be followed in this stage:
   1. Development completed.
   2. Automatic code review performed.
   3. All review comments closed.
   4. Unit test performed.
   5. All unit test cases closed.
   6. Code checked into github.
   7. CI / CD pipeline to notify the Peer Reviewer with an automated systems email notification.
3. **Peer Code Review**  to be done by a peer.
   1. Code checked out into peer’s desktop.
   2. Manual peer review done.
   3. If **rejected**, the reviewer will raise review comments and reject the product increment.
   4. CI / CD pipeline to fail and notify the developers with an automated systems email notification mentioning a link to the review comments raised above.
   5. If **approved**, developers and testers will be notified in an automated systems email notification.
   6. CI / CD pipeline will proceed to the Automation Testing stage.
4. **Automation Regression Testing**. System will perform the Regression automation tests on the product increment.
   1. If **failed**, the CI / CD pipeline will fail.
   2. If **passed**, the CI / CD pipeline will proceed to the manual testing stage.
   3. In either case, CI/CD pipeline to notify the developers with an automated systems email notification mentioning a link to the test results.
5. **Manual Testing**. Testers from the scrum team will perform the following manually on the product increment:
   1. **System testing**.
      1. If any test case **fails**, the entire CI / CD pipeline will fail.
      2. If all test cases **pass**, the CI / CD pipeline will proceed to the Integration Testing stage.
      3. In either case (pass or fail), CI/CD pipeline will notify the developers with an automated systems email notification mentioning a link to the test results.
   2. **Integration testing**.
      1. If any test case **fails**, the entire CI / CD pipeline will fail.
      2. If all test cases **pass**, the CI / CD pipeline will proceed to the Performance Testing stage.
      3. In either case (pass or fail), CI/CD pipeline will notify the developers with an automated systems email notification mentioning a link to the test results.
6. **Performance Testing**. System will perform the **Performance** automation tests on the product increment.
   1. If **failed**, the CI / CD pipeline will fail.
   2. If **passed**, the CI / CD pipeline will proceed to the Acceptance Testing stage.
   3. In either case, CI/CD pipeline to notify the developers with an automated systems email notification mentioning a link to the test results.
7. **Acceptance Testing**. Business users will perform the Acceptance tests on the product increment:
   1. If any test case **fails**, the entire CI / CD pipeline will fail.
   2. If all test cases **pass**, the CI / CD pipeline will proceed to the Pre Production or Staging stage.
   3. In either case (pass or fail), CI/CD pipeline will notify the entire scrum team (Product Owner, Scrum Master and Development Team)  with an automated systems email notification mentioning a link to the test results.
8. **Hardening**: The product increment will be kept in staging or pre production environment until manually deployed to the production environment.
9. **Deployment**: The product will be manually deployed to the production environment from the pre-production environment as per business requirements. Separate business decisions and planning will be required for production deployment and release.
10. Scrum Events
    1. Sprint
11. **Sprint Length:** 2 weeks.
12. **First Sprint Start Date:** 22/06/2020
    1. Daily Scrum
13. **Periodicity:** All working days.
14. **Time:** 11:00amIST / 3:30pmAEST / 4:30pmAEDT
15. **Duration:** 15 mins.
16. **Artifacts:**
17. **Sprint Backlog:** Project Google Drive > AnodiamDocs > BA > Look in the current sprint folder:

<https://drive.google.com/drive/u/3/folders/1sY8u6XdNrR7e_jY4HSE7xi74SeYqSdxJ>

1. **Sprint Burndown:** Project Google Drive > AnodiamDocs > AgilePM > Look in the current sprint folder:

<https://drive.google.com/drive/u/0/folders/1snSvCnb8-r6z_be5TztR6PdVYn7Gf4aU>

1. **Scrum Board:** Project Google Drive > AnodiamDocs > AgilePM > Look in the current sprint folder:

<https://drive.google.com/drive/u/0/folders/1snSvCnb8-r6z_be5TztR6PdVYn7Gf4aU>

1. **Impediment List:** Project Google Drive > AnodiamDocs > AgilePM > Look in the current sprint folder:

<https://drive.google.com/drive/u/0/folders/1snSvCnb8-r6z_be5TztR6PdVYn7Gf4aU>

* 1. Product Backlog Refinement

1. **Periodicity:** First Thursday of the previous sprint.
2. **Time:** 10:00amIST / 2:30pmAEST / 3:30pmAEDT
3. **Duration:** 4 hrs.
4. **Artifacts:**
5. **Product Backlog:** Project Google Drive > AnodiamDocs > BA:

<https://drive.google.com/drive/u/3/folders/1sY8u6XdNrR7e_jY4HSE7xi74SeYqSdxJ>

1. **Sprint Backlog:** Project Google Drive > AnodiamDocs > BA > Look in the current sprint folder:

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1. **Task Estimation:** Project Google Drive > AnodiamDocs > AgilePM > Look in the current sprint folder:

<https://drive.google.com/drive/u/0/folders/1snSvCnb8-r6z_be5TztR6PdVYn7Gf4aU>

* 1. Sprint Planning

1. **Periodicity:** Second Thursday of the previous sprint.
2. **Time:** 10:00amIST / 2:30pmAEST / 3:30pmAEDT
3. **Duration:** 4 hrs.
4. **Estimation Method:** Planning Poker
5. **Artifacts:**
6. **Product Backlog:** Project Google Drive > AnodiamDocs > BA:

<https://drive.google.com/drive/u/3/folders/1sY8u6XdNrR7e_jY4HSE7xi74SeYqSdxJ>

1. **Sprint Backlog:** Project Google Drive > AnodiamDocs > BA > Look in the current sprint folder:

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2. <https://drive.google.com/drive/u/0/folders/1snSvCnb8-r6z_be5TztR6PdVYn7Gf4aU>
   1. Sprint Review
3. **Periodicity:** Second Friday of the previous sprint.
4. **Time:** 9:00amIST / 1:30pmAEST / 2:30pmAEDT
5. **Duration:** 2 hrs.
6. **Note:**

No MoM will be written, Product backlog, Best Practices document or other specific artifacts will be updated in the meeting only.

1. **Artifacts:**
2. **Product Backlog:** Project Google Drive > AnodiamDocs > BA:

<https://drive.google.com/drive/u/3/folders/1sY8u6XdNrR7e_jY4HSE7xi74SeYqSdxJ>

1. **Best Practices:** Project Google Drive > AnodiamDocs > AgilePM:

<https://drive.google.com/drive/u/0/folders/1snSvCnb8-r6z_be5TztR6PdVYn7Gf4aU>

* 1. Sprint Retrospective

1. **Periodicity:** Second Friday of the previous sprint.
2. **Time:** 12:00pmIST / 4:30pmAEST / 5:30pmAEDT
3. **Duration:** 1:30 hrs.
4. **Note:**

No MoM will be written, Product backlog, Best Practices document or other specific artifacts will be updated in the meeting only.

1. **Artifacts:**
2. **Product Backlog:** Project Google Drive > AnodiamDocs > BA:

<https://drive.google.com/drive/u/3/folders/1sY8u6XdNrR7e_jY4HSE7xi74SeYqSdxJ>

1. **Best Practices:** Project Google Drive > AnodiamDocs > AgilePM:

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1. Team Organization
   1. Product owner

Debasish Nath

* 1. Scrum Master

Anirban Chakrabarty

1. Team Capacity

**Flexi timing:** 35 hrs per week, per person, on an average.

**Work days:** Preferably Monday to Friday.

**Planned holidays:** 20 working days a year.

**Personal time offs:** 20 working days a year.

* 1. Unavailable time

**Per person per 2 weeks sprint.**

**Meetings:** 17 hrs

**Others:** 3 hrs

* 1. Final capacity

**50 hrs per person per 2 weeks sprint.**

Therefore, a commitment of 5 hrs of individual contribution per person per working day is required, outside of meetings and collaboration activities. This is advised to be flexi hours that suits each individual’s personal requirements and timezones.

1. Effort Estimation
   1. Methodology

Planning Poker Estimation

* 1. T-shirt Sizing Vs Story Points Vs Effort

**XS :** 1 Story Point : 0 to 2 person hours

**S :** 2 Story Points : 2 to 4 person hours

**M :** 3 Story Points : 4 to 8 person hours

**L :** 5 Story Points : 1 to 1.5 person days

**XL :** 8 Story Points : 1.5 to 2.5 person days

**XXL :** 13 Story Points : 0.5 to 1 person weeks

**XXXL :** 21 Story Points : Larger and never used

1. Scrum Artifacts

Anodiam project will require the following artifacts:

* 1. Product Increments

Product Increments will be developed on developer desktops and checked in into the following github account:

<https://github.com/anodiamadm>

1. **Enablers**

Following private github repository has been created for code developments related to Cloud Infrastructure, DevOps, IaC, Containerization, Service Reliability, Load Testing and other infrastructure-related developments. Code for such purposes will be developed on developers’ desktops and checked in into the following github repository:

<https://github.com/anodiamadm/Infra>

1. **Features:**

Following private github repository has been created for code developments related to Web Applications, Mobile Apps, Web Services, Databases, A/I, IoT, Automated Functional Testing and other related applications and features development. Code for such purposes will be developed on developers’ desktops and checked in into the following github repository:

<https://github.com/anodiamadm/Apps>

* 1. Scrum Board

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* 1. Requirement Ambiguities and Resolution

Project Google Drive > AnodiamDocs > BA > Look in the current sprint folder:

<https://drive.google.com/drive/u/3/folders/1sY8u6XdNrR7e_jY4HSE7xi74SeYqSdxJ>

* 1. Manual Test Suit

Project Google Drive > AnodiamDocs > QA > Look in the current sprint folder:

<https://drive.google.com/drive/folders/1ccYM9Ma7ZWPBhngLDH-8N0OeEQGOe8tB>

* 1. Bug Tracker

Project Google Drive > AnodiamDocs > QA > Look in the current sprint folder:

<https://drive.google.com/drive/folders/1ccYM9Ma7ZWPBhngLDH-8N0OeEQGOe8tB>

* 1. Impediments Tracking

Project Google Drive > AnodiamDocs > AgilePM > Look in the current sprint folder:

<https://drive.google.com/drive/folders/1snSvCnb8-r6z_be5TztR6PdVYn7Gf4aU>

* 1. Task Breakdown and Estimation

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* 1. Training, Induction and Development Environment

Project Google Drive > AnodiamDocs > AgilePM:

<https://drive.google.com/drive/folders/1snSvCnb8-r6z_be5TztR6PdVYn7Gf4aU>