*Project Management Life Cycle: Introduction*

**Project Management Life Cycle**

**– Portfolio Management Office - 2009**

*Project Management Life Cycle: Introduction*

**Table of Contents**

**INTRODUCTION TO THE – PROJECT MANAGEMENT LIFE CYCLE** **3**

**PMLC OVERVIEW** **5**

**SDLC OVERVIEW** **13**

**PROJECT TYPES**

**SOFTWARE DEVELOPMENT PROJECT** **4**

1.0 Origniation Phase **6**

2.0 Initiation Phase **8**

3.0 Planning Phase **17**

4.1 Analysis Phase **22**

4.2 Design Phase **27**

4.3 Construction Phase **34**

4.4 Testing Phase **42**

4.5 Training Phase **48**

4.6 Deployment Phase **50**

5.1 Close Phase **56**

5.2 Post-Close Phase **59**

INDEX OF DELIVERABLES **60**

**ANALYSIS PROJECT** **TBD**

**SOFTWARE UPGRADE PROJECT** **TBD**

**HARDWARE INSTALLATION/UPGRADE PROJECT** **TBD**

**ROUTINE OS LEVEL MAINTENANCE PROJECT** **TBD**

*Project Management Life Cycle: Introduction*

**- Project Management Life Cycle: Introduction**

The Portfolio Management Office (PMO) provides guidelines and standards for project management in . The PMO formed a working group to define the Project Management Life Cycle (PMLC) for led projects. The PMLC and standards have been developed to assist project managers in the planning and execution of projects as well as to provide a documented, repeatable process to enhance and standardize project execution and performance.

While we have attempted to define the PM process and deliverables ‘end-to-end’, the nature of the project will dictate which elements are applicable to the respective project.

The PMO has identified five project types that should account for most of the projects managed by

. Those project types are as follows:

|  |  |
| --- | --- |
| **Project Type** | **Description** |
| Software Development Project | Full end-to-end analysis and development project. |
| Analysis Project | Project to assess feasibility and scope of a potential |
|  | implementation project. Deliverable is functional |
|  | specifications and an implementation project template. |
| Software Upgrade Project | Upgrade to existing software. |
| Hardware Installation / Upgrade | Installation of new hardware or upgrade of current hardware. |
| Project |  |
| Routine OS Level Maintenance | Recurring periodic maintenance for operations / infrastructure. |
| Project |  |

In future a version of this documentation, PMO will provide documentation of the PMLC as it relates to all of the project types identified above including pre-built project plan templates customized by project type. As of this current version of the PMLC, the life cycle has been designed only for software development projects.

For Software Development projects, we have worked with the Software Engineering Process Group (SEPG) as they define the software development life cycle (SDLC). In order to maintain consistency in the processes, deliverables and terminology between the PMLC and SDLC, we are sharing this portion of the PMLC as a single document. As such, the SDLC documentation is extractable from the overall PMLC documentation as a stand-alone document. In the context of the PMLC for the software development, the PMLC adds the Origination and Initiation phases onto the front end of the SDLC and the Post-close phase on the back end of the SDLC.

For reference throughout this documentation, below is a table which lists the various participant roles and how they map to the current organizational structure.

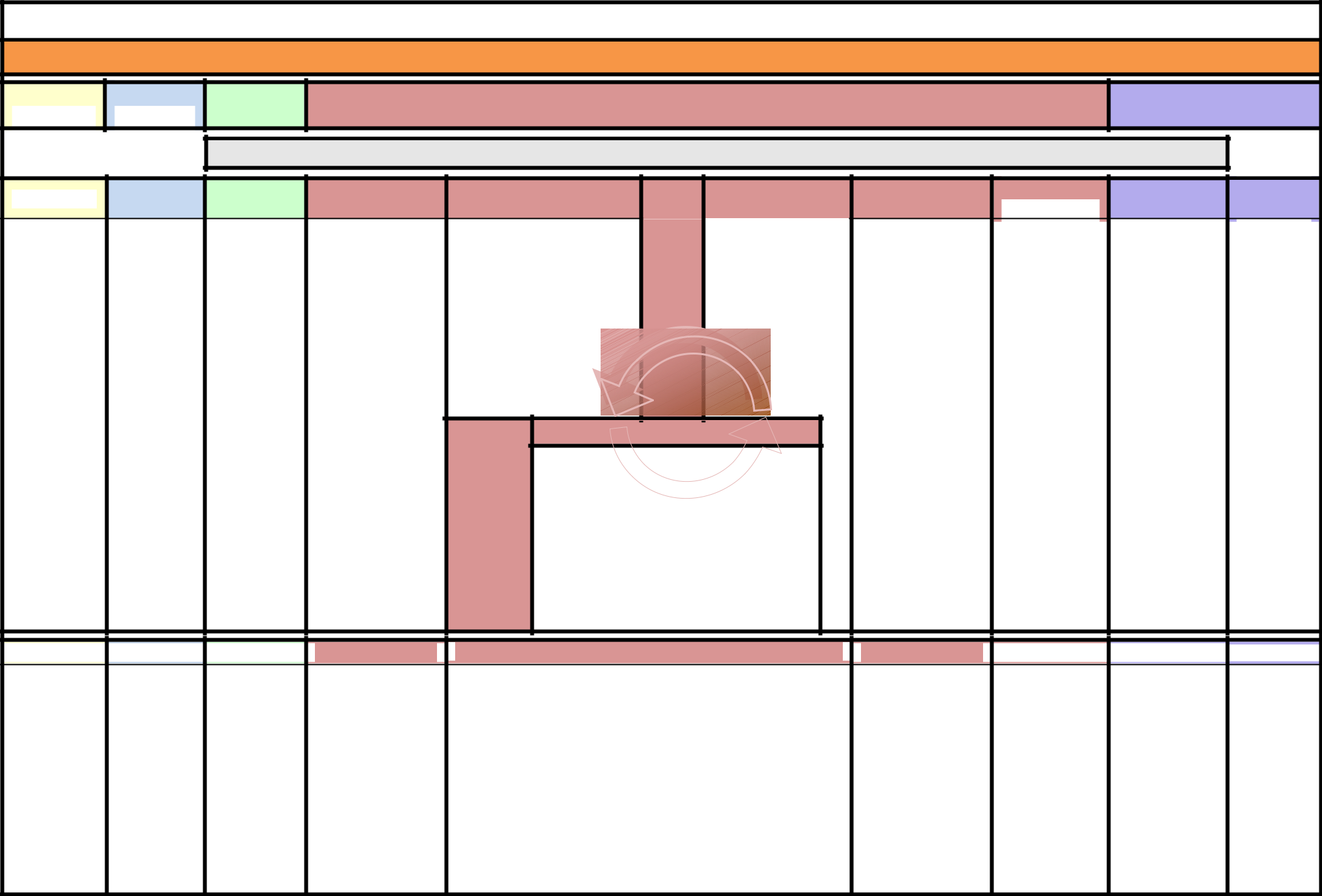
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|  | *Project Management Life Cycle: Introduction* | |
|  |  |  |
| **Life Cycle Role** | **Participant** |  |
| Analyst | Architecture, Technical, Functional, and Integration Analysts |  |
| Customer | Customers external to , Customers within |  |
| Deployment | Deployment Team, Architecture |  |
| Development | Architecture, Application and Report Developers, Data Modelers, Data |  |
|  | Base Administrators |  |
| EAC | Enterprise Architecture Committee |  |
| Operations | Application Support Team, EAI Team, Production Control Team, System |  |
|  | Administrators, Operations Team, Server Management, Storage Team |  |
| PMO | Portfolio Management Office |  |
| Project Manager | Project Manager |  |
| Project Sponsor | Project Sponsor |  |
| Quality Assurance | Quality Assurance Team |  |
| Security | Security Team, Architecture |  |

*Project Management Life Cycle: Software Development Project*

**Project Type:**

**Software Development Project**

*Project Management Life Cycle: Software Development Life Cycle 2.0*

**

**– Project Management Life Cycle – Software Development Projects**

**Project Management Life Cycle**

**1 Project**

**Origination**

**2 Project**

**Initiation**

|  |  |  |
| --- | --- | --- |
| **3 Project** | **4 Project Execution and Control** | **5 Project Closeout** |
| **Planning** |  |
|  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Software Development Life Cycle** | |  |  |  |  |
| **1 Origination** | **2 Initiation** | **3.0 Planning** | **4.1 Analysis** | **4.2 Design** | | **4.4 Testing** | **4.5 Training** | **4.6** | **5.1 Close** | **5.2 Post** |
| **Deployment** | **Close** |
|  |  |  |  |  |  |  |  |  |
| - ITPC Template | -Discovery | - Project Plan in | - Business Rules | - DWG Design | - Technical Design | - Technical Design Review | - Training Environment | - Application | - Post Deployment | - Post Project |
| - Project Review | meetings | Clarity | - DWG Design Collaboration | Collaboration | Review | - QA Master Test Plan | - Artifact Staging | Deployment Checklist | Review | Survey |
| - Project Approval | -Stakeholder | (WBS, Resources, | - Application Design | - Style Guides | - QA Master Test | - Training Plan | - Training Security Setup | - Artifact Staging | - Environment Review |  |
| - Project Creation | analysis | Estimates, and | - Integration Design | - Service Guides | Plan | - Hardware / Software Order | - Customer Training | - Dress Rehearsal | and Cleanup |  |
| - Priority Setting | - Communication | Schedule) | - Conversion Strategy | - Technical | - Training Plan | Communicate | -Communicate | - Change Control | - Stakeholder |  |
| - Project Scheduling | plan | - Project planning | - EAC Review | Design | - Hardware / | -Monitor and Control | -Monitor, Control, and | - Event Notice | Satisfaction Survey |  |
|  | - Project Charter | meetings with | - Security Review | - EAC Review | Software Order | - Manage Change Requests | Manage Change | - System Deployment | - Post Project Review |  |
|  | - Project Kick Off | team | - Application Design Review | - Security | Communicate | - IITAA Checklist |  | - Production Readiness | - Final Project |  |
|  | -Communication | - PMO / SMT Sign- | - Training Strategy | Review | -Monitor and Control | |  | Test | Documentation Review |  |
|  | activities | Off | - Testing Strategy | - Sensitive Data | - Manage Change |  |  | - Go / No Go Decision | - Short Term Post |  |
|  |  | -Final project plan | -- Communicate | Usage Form | Requests |  |  | - Communicate | Project Support |  |
|  |  | review and | -Monitor, Control, and |  |  |  |  | -Monitor, Control, and | - Production Support |  |
|  |  | approval with team | Manage Change |  |  |  |  | Manage Change |  |  |
|  |  | -Baseline project |  |  |  | **4.3 Construction** |  |  |  |  |
|  |  | - Deployment Plan |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

|  |  |
| --- | --- |
| - EAC Review | - User Guides / Help Materials |
| - Development | - Communicate |
| - System Test Plan | -Monitor and Control |
| - Functional Test | - Manage Change Requests |
| - QA Test Cases / Scripts | - Hardware / Software |
| - QA Functional Test | Installation |
| - Performance Test Plan | - Infrastructure Deployment |
| - Performance Test | - Development / Unit Test Cycle |
| - Security Scans | - Show and Tell |
| - Customer Test Plan | - DWG Design |
| - Alpha Test | - Code Review |
| - Training Materials | - Defect Management |

 **Participants Participants Participants  Participants  Participants  Participants  Participants  Participants  Participants **

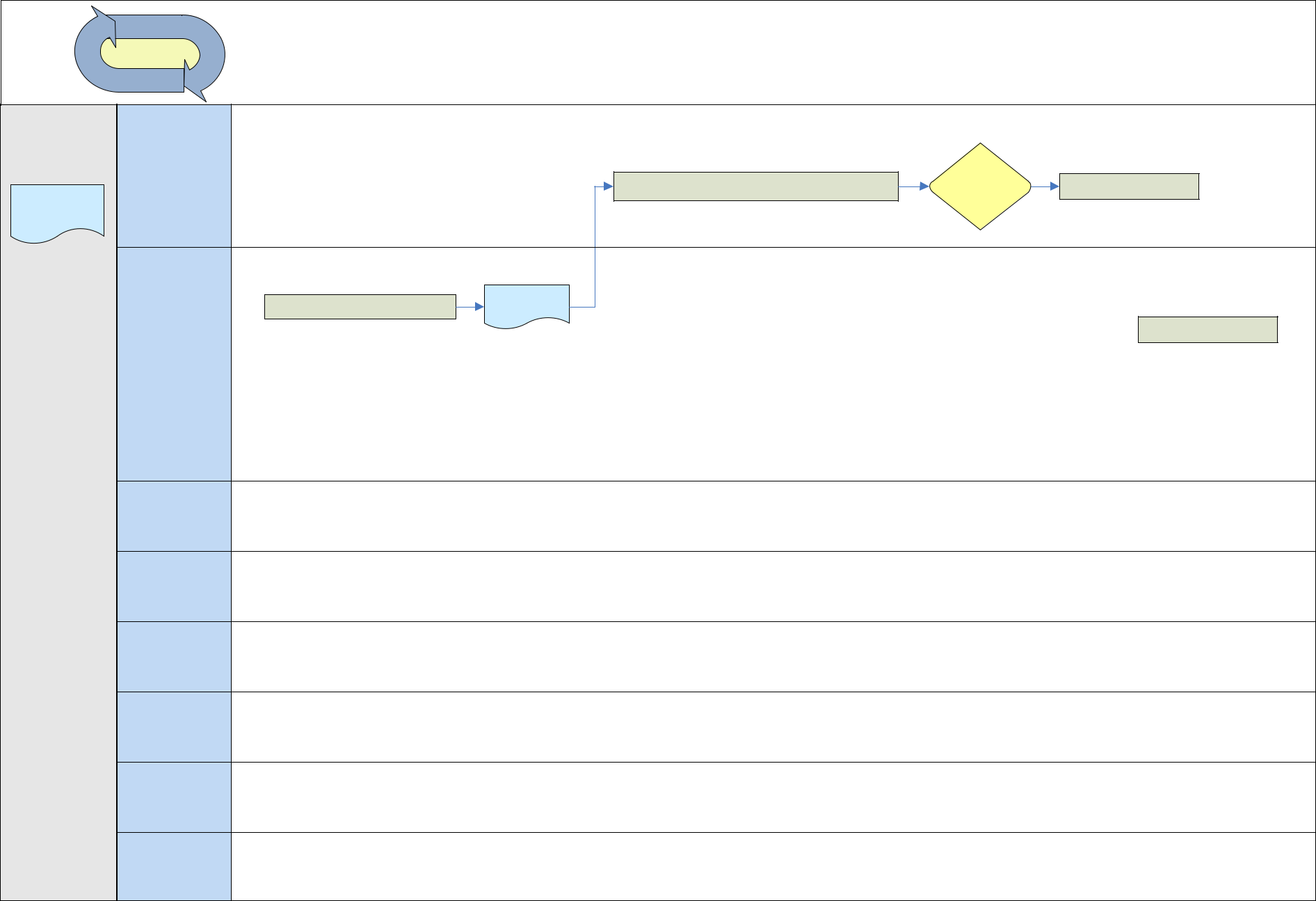
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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| - AAMT | - AFM | - Analyst | - Analyst | - Analyst | - Operations | - Analyst | - Analyst | - Analyst | - Customer |
| - ADSD Managers | - Analyst | - Architecture | - Architecture | - Architecture | - Project Manager | - Customer | - Customer | - Architecture | - PMO |
| - Architecture | - Architecture | - Customer | - Customer | - Customer | - Project Sponsor | **- Deployment** | - Deployment | - Customer | - Project |
| - COE Managers | - Customer | - Deployment | - Deployment | - Deployment | - Quality Assurance | **- Development** | - Development | - Deployment | Manager |
| - EAC | - Deployment | - Development | - Development | - Development | - Security | **- Project Manager** | - Operations | - Development | - Project Sponsor |
| - ITPC | - Development | - Operations | - Development Working | - Development Working Group | - Training Team | **- Security** | - Project Manager | - Operations |  |
| - ITPC | - Operations | - PMO | Group |  |  |  | - Project Sponsor | - PMO |  |
| Subcommittees | - PMO | - Project Manager | - Operations |  |  |  | - Quality Assurance | - Project Manager |  |
| - PMO | - Project Manager | - Project Sponsor | - Project Manager |  |  |  | - Security | - Project Sponsor |  |
| - Project Sponsor | - Project Sponsor | - Quality Assurance | - Project Sponsor |  |  |  |  | - Project Team |  |
| - SMT | - Quality | - Security | - Quality Assurance |  |  |  |  | - Quality Assurance |  |
| - UA Technology | Assurance | - SMT | - Security |  |  |  |  | - Security |  |
| Organizations | - Security | - Technical Lead | - Training Team |  |  |  |  |  |  |

* UA Technology Orgs

Page 6 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Origination Phase*

**Origination Phase**

****

|  |  |
| --- | --- |
| ***Life Cycle*** | 1.0 Origination |
| ***Software Development*** |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **SDLC** |  |  |  |
| Phase |  |  |  |  |
| Inputs |  |  |  |  |
|  | **Customer** | ITPC Committee / Subcommittee Review | ITPC / AAMT | Prioritize Projects |
| High Level |  | Review |
|  |  |  |
| System |  |  |  |  |
| Requirements |  |  |  |  |
|  | Create ITPC Template | ITPC Template |  |  |
|  |  |  |  |
|  |  |  |  | Schedule Projects |
|  | **Project** |  |  |  |
|  | **Management** |  |  |  |
|  | **Analyst** |  |  |  |
|  | **Development** |  |  |  |
|  | **Quality** |  |  |  |
|  | **Assurance** |  |  |  |
|  | **Security** |  |  |  |
|  | **Deployment** |  |  |  |
|  | **Operations** |  |  |  |

Page 7 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Origination Phase*

**Phase 1: Origination**

The purpose of the Origination Phase is to develop proposals for potential projects, route the proposals through the proper review channels, and after review, if approved, schedule the projects based on priority and resource availability. Both ITPC and internal projects will pass through this phase, but will trigger different activities and key deliverables.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  | **Description** | | | |  | **Inputs** | **Outputs** | | | | | **Owner / Participant** |  | **Links / Notes** | | | | | | |  |
|  | Complete an ITPC |  | An ITPC template should be completed for all ITPC and internal projects. | | | |  |  |  | - Level I or II | | | | Project Sponsor (Owner) |  | [For a further](http://www.itpc.uillinois.edu/itpcprojsubmissions) | | | | | | |  |
|  | Level I or II |  | Internal project templates will be reviewed by SMT while ITPC projects will | | | |  |  |  | Completed ITPC | | | | UA Technology Organizations |  | [description of the ITPC /](http://www.itpc.uillinois.edu/itpcprojsubmissions) | | | | | | |  |
|  | Template |  | follow the ITPC review and approval process. The templates are designed to | | | |  |  |  | Template with | | | | Architecture |  | [Work Request process](http://www.itpc.uillinois.edu/itpcprojsubmissions) | | | | | | |  |
|  |  |  | be self explanatory and can be located @ | | | |  |  |  | Business Case and | | | |  |  | [please go to:](http://www.itpc.uillinois.edu/itpcprojsubmissions) | | | | | | |  |
|  |  |  | <http://www.itpc.uillinois.edu/itpcprojsubmissions> | |  | |  |  |  | Resource Estimates, | | | |  |  | [http://www..uillinoi](http://www.itpc.uillinois.edu/itpcprojsubmissions) | | | | |  | |  |
|  |  |  |  |  |  |  |  |  |  | SOW Request (also | | | |  |  | [s.edu/live/Site.xml?doc](http://www.itpc.uillinois.edu/itpcprojsubmissions) | | | |  | | |  |
|  |  |  | If a client requires assistance with the creation a template or the work | | | |  |  |  | known as a Project | | | |  |  | [ument=RequestWork.x](http://www.itpc.uillinois.edu/itpcprojsubmissions) | | | | | | |  |
|  |  |  | estimate, a work request should be submitted to the Unicenter -ADSD | | | |  |  |  | Proposal) | |  |  |  |  | [ml&focus=N5](http://www.itpc.uillinois.edu/itpcprojsubmissions) | | |  | | | |  |
|  |  |  | work requests queue and an analyst will be assigned. The TAM functional | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | area leads will review all ITPC template estimates for reasonableness. All | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | assumptions made in creating the estimate should be clearly detailed in the | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | template. The project proposals should be reviewed at the weekly | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Architecture / ADSD meetings and the results of this review should influence | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | the estimate. Projects should be further reviewed by this group in the | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Design and Construction phases of the project. | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Completed templates should be submitted to [ITPC@uillinois.edu.](mailto:ITPC@uillinois.edu) | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | |  |  |  |  |  | | | |  |  |  | | | | | | |  |
|  | Review Project to |  | The Project Review subcommittee will review projects that are proposed | | | |  | - Project Proposal |  | - Level of | | | | Portfolio Management Office |  | [https://intranet.uillinois](http://www.itpc.uillinois.edu/EAC) | | | | | |  |  |
|  | Determine EAC |  | under and ITPC. The PMO/EAC liaison will meet with EAC leadership | | | |  | (Completed ITPC |  | Involvement by EAC | | | | (Owner) |  | [.edu/departments/pa/e](http://www.itpc.uillinois.edu/EAC) | | | | | | |  |
|  |  |  |  | | | |  |  |  |  | | | |  |  |  |  | | | |  |  |  |
|  | Involvement |  | and TAM leadership on a monthly basis to identify ITPC projects that may | | | |  | Template) |  | - Feedback to | | | | Enterprise Architecture |  | [ac/ITPC%20%20EAC%20](http://www.itpc.uillinois.edu/EAC) | | | | | | |  |
|  |  |  | benefit from early EAC involvement. By introducing the concept of | | | |  |  |  | Management or | | | | Committee |  | [Review/\_EAC\_Proje](http://www.itpc.uillinois.edu/EAC) | | | | | | |  |
|  |  |  |  | | | |  |  |  |  | | | |  |  |  |  | | | | |  |  |
|  |  |  | “architecture” early on it is the hope that decisions made during the project | | | |  |  |  | ITPC | | | | TAM Leadership |  | [ctReviewSubcommittee.](http://www.itpc.uillinois.edu/EAC) | | | | | | |  |
|  |  |  | will take architectural standards and policies into consideration. | | | |  |  |  |  |  |  |  |  |  | [pdf](http://www.itpc.uillinois.edu/EAC) | | | | | | |  |
|  |  |  |  | | | |  |  |  |  | | | |  |  |  |  |  |  |  |  |  |  |
|  | Obtain |  | Project proposals (either in the form of completed ITPC templates or | | | |  | - Project Proposal |  | - Project Approved / | | | | Management Group (Owner) |  |  |  |  |  |  |  |  |  |
|  | Management |  | internal project proposals) related to technology projects or internal | | | |  | (either completed |  | Denied | | | |  |  |  |  |  |  |  |  |  |  |
|  | Group |  | projects will be routed to the Management Group (MG) by the PMO for | | | |  | ITPC Template or |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Review/Approval |  | review at their next meeting. The project sponsor may be asked to attend | | | |  | internal project |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | for Internal |  | MG to present the proposal. The proposal may be approved and queued for | | | |  | proposal) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Projects |  | scheduling (if internal), approved to proceed to ITPC review (if technology), | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | rejected, or deferred with a request for additional information. | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | | | |  |  |  |  | | | |  |  |  |  |  |  |  |  |  |  |
|  | Obtain ITPC |  | Completed ITPC templates will be routed to the appropriate functional ITPC | | | |  | -Project Proposal |  | - Project Approved / | | | | ITPC Subcommittee (Owner) |  |  |  |  |  |  |  |  |  |
|  | Subcommittee |  | subcommittee (Finance, HR, or Student) for review at their next meeting. | | | |  | (completed ITPC |  | Denied | | | |  |  |  |  |  |  |  |  |  |  |
|  | Approval for ITPC |  | ITPC subcommittees meet monthly. The proposal may be approved and | | | |  | Template) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Projects |  | forwarded to ITPC for review, rejected, or deferred with a request for | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | additional information. | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Page 8 of 67

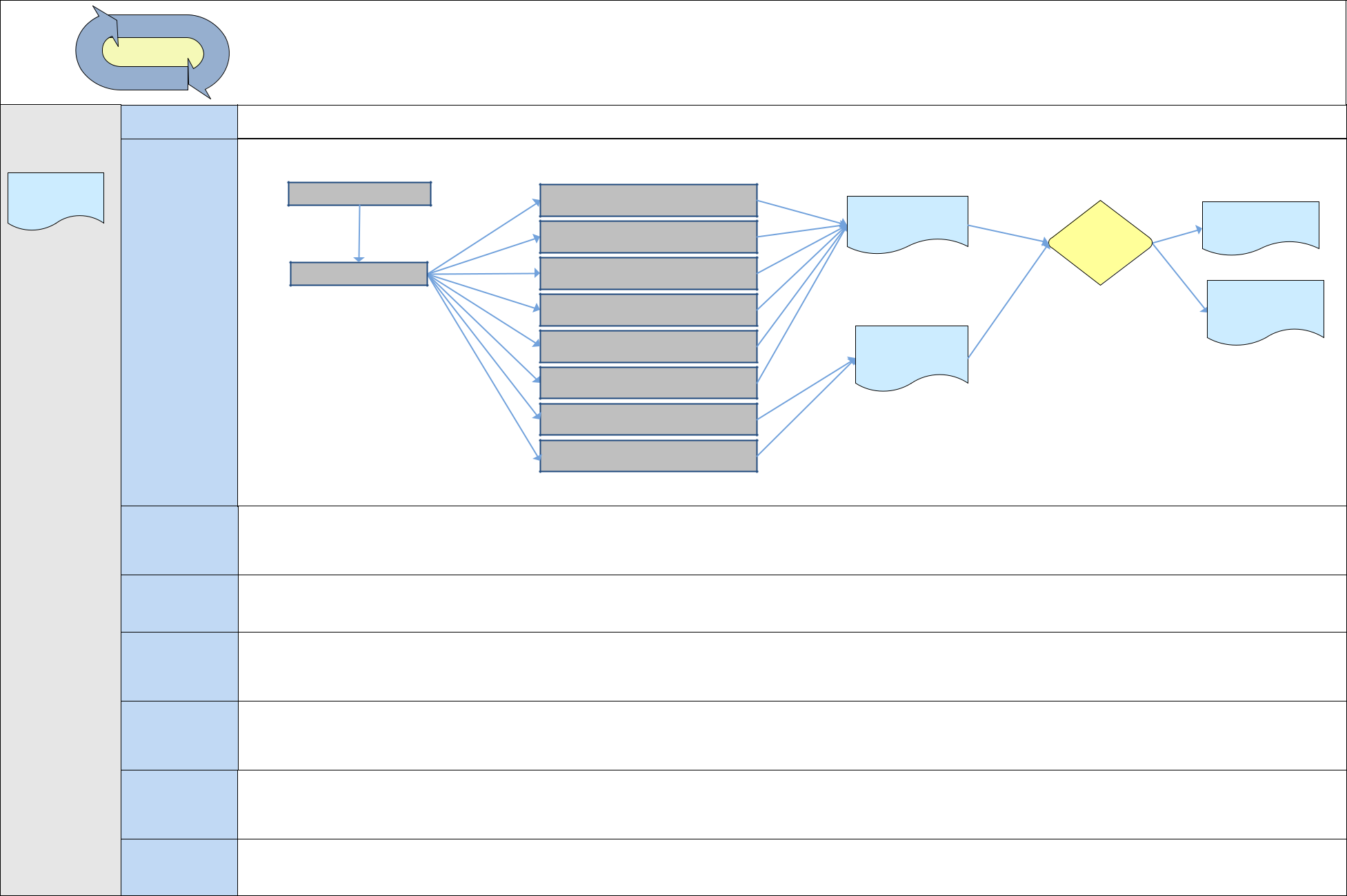
*Project Management Life Cycle: Software Development Life Cycle 2.0: Origination Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** |  | **Description** |  |  | **Inputs** |  | **Outputs** |  | **Owner / Participant** |  |  | **Links / Notes** | | |  |
| Obtain ITPC |  | Level 2 ITPC project proposals approved at the ITPC level will be routed to |  |  | -Project Proposal |  | - Project Approved / | Illinois Technology Priorities | |  |  |  |  |  |  |
| Review/Approval |  | the ITPC for review at their next meeting. ITPC meets quarterly. At this |  |  | (completed ITPC |  | Denied |  | Committee (Owner) |  |  |  |  |  |  |
| for ITPC Level II |  | meeting, level 2 templates may be approved, rejected, or deferred with a |  |  | Template) |  |  |  |  |  |  |  |  |  |  |
| Projects |  | request for additional information. |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Initial Project |  | Using the approved project proposal as a guide, a member of the PMO will |  |  | -Project Proposal |  | - Project Setup in |  | Portfolio Management Office |  |  |  |  |  |  |
| Setup in Clarity |  | initially set up the project in Clarity. This initial set up will include |  |  | (completed ITPC |  | Clarity |  | (Owner) |  |  |  |  |  |  |
|  |  | placeholder project plan tasks to hold the effort by role in the project |  |  | Template) |  |  |  |  |  |  |  |  |  |  |
|  |  | template. Later when the project manager begins to construct the project |  |  | - Project Plan |  |  |  |  |  |  |  |  |  |  |
|  |  | plan, the placeholder task should be discarded and replaced by the project |  |  | Template |  |  |  |  |  |  |  |  |  |  |
|  |  | plan template derived from this PMLC/SDLC. |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Determine |  | On a quarterly basis, MG will prioritize all ITPC technology projects and |  |  | - Projects to be |  | - Priority List of |  | Management Group (Owner) |  |  |  |  |  |  |
| Priority of |  | internal projects. Projects will be scheduled based on this prioritization |  |  | scheduled in queue |  | Projects |  |  |  |  |  |  |  |  |
| Internal Projects |  | and resource capacity. Mandatory projects will be scheduled based on the |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | nature of the projects and production date requirements. MG will further |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | prioritize Internal and ITPC projects where conflicts exist in scheduling. |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Determine |  | On a quarterly basis, the functional ITPC subcommittees and ITPC will |  |  | - Projects to be |  | - Priority List of |  | ITPC Subcommittee and ITPC |  |  |  |  |  |  |
| Priority of ITPC |  | prioritize all ITPC projects approved but not yet started within their |  |  | scheduled in queue |  | Projects |  | (Owner) |  |  |  |  |  |  |
| Projects |  | functional areas. Projects will be scheduled based on this prioritization and |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | resource capacity. Mandatory projects will be scheduled based on the |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | nature of the projects and production date requirements. |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | | |  |
| Set Project |  | On a monthly basis, the project schedule for both internal and ITPC projects |  |  | - Priority List of |  | - Monthly Project |  | Portfolio Management Office |  |  | [https://www.itpc.uillino](https://www.itpc.uillinois.edu/ItpcProjectPrioritize) | | |  |
| Schedule |  | is reviewed and adjusted based on project prioritization and resource |  |  | Projects Resource |  | Schedule |  | (Owner) |  |  | [is.edu/ItpcProjectPriorit](https://www.itpc.uillinois.edu/ItpcProjectPrioritize) | |  |  |
|  |  | capacity. During this project scheduling process, managers review all |  |  | availability |  |  |  | ADSD Managers |  |  | [ize](https://www.itpc.uillinois.edu/ItpcProjectPrioritize) | | |  |
|  |  | projects in flight do determine required adjustments as well as to provide |  |  | information |  |  |  | COE Managers |  |  |  |  |  |  |
|  |  | consistent communication regarding project status. After reviewing in flight |  |  |  |  |  |  | UA Technology Organizations |  |  |  |  |  |  |
|  |  | projects, the managers schedule projects in the queue based on the |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | provided priorities as well as the resource capacity available for new |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | projects. This schedule is further fine tuned based on collaboration with |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | representatives from all of the functional areas. |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 9 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Initiation Phase*

**Initiation Phase**

****

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  | **SDLC** | 2.0 Initiation |  |  |  |
|  |  |  |  |  |
| Phase | **Customer** |  |  |  |  |
| Inputs |  |  |  |  |  |
| Project |  |  |  |  |  |
| Proposal/ | Set up project | Refine project scope |  |  |  |
| ITPC |  | Draft project |  | Final project |
|  |  |  |
|  |  |  | charter |  |
|  |  | Establish work and project | Kick-off | charter |
|  |  |  |
|  |  | processes |  |  |
|  |  |  | meeting |  |
|  |  |  |  |  |
|  | Discovery meeting | Identify and plan for risks |  |  |  |
|  |  | Identify impacts, dependencies, |  |  | Final |
|  | **Project** |  |  | communication |
|  | &assumptions |  |  | plan |
|  | **Management** |  | Draft |  |  |
|  |  | Revise preliminary estimates |  |  |
|  |  | communication |  |  |
|  |  |  |  |  |
|  |  |  | plan |  |  |
|  |  | Identify project team |  |  |  |
|  |  | Identify stakeholders |  |  |  |
|  |  | Plan communication |  |  |  |
|  | **Analyst** |  |  |  |  |
|  | **Development** |  |  |  |  |
|  | **Quality** |  |  |  |  |
|  | **Assurance** |  |  |  |  |
|  | **Security** |  |  |  |  |
|  | **Deployment** |  |  |  |  |
|  | **Operations** |  |  |  |  |

Page 10 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Initiation Phase*

**Phase 2: Initiation**

The purpose of the Initiation Phase is to develop the Communication Plan and Project Charter to formalize project goals and deliverables, identify project participants and establish roles and responsibilities. The project team will review the Project Charter Communication Plan at the Kick-Off meeting to provide all participants with a shared understanding of project expectations.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** | **Description** | **Inputs** | **Outputs** | **Owner / Participant** |  | **Links / Notes** | | | | | |
| Set up project | During project setup, the Project Manager introduces him/herself to the | -Project Proposal | - Initial contacts | Project Manager (Owner) |  | Initiating a Project | | | | | |
|  | primary team members and stakeholders as well as updates the Clarity | (either the | - Initial Clarity |  |  | course and related | | | | | |
|  | project and the SharePoint workspace for the project | completed ITPC | updates |  |  | materials can be | | | | | |
|  |  | template or an | - Initial SharePoint |  |  | found in the | | | | | |
|  |  | internal project | workspace |  |  | SharePoint | | | | | |
|  |  | proposal) | customization |  |  | Document Library | | | | | |
|  |  |  |  |  |  | under Methodology | | | | | |
|  |  |  |  |  |  | > Project | | | | | |
|  |  |  |  |  |  | Management | | | | | |
|  |  |  |  |  |  | Lifecycle | | | | | |
| Hold Discovery | The purpose of the discovery meetings are to bring all the participants | -Project Proposal | - More complete list | Project Manager (Owner) |  | [A template for the](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/Project_Discovery_Meeting_Agenda_and_Notes_Template.dotx) | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Meetings | together, introduce them to the project, and give team members a forum for |  | of stakeholders, | Project Sponsor |  | [Discovery Meeting](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/Project_Discovery_Meeting_Agenda_and_Notes_Template.dotx) | | | | | |
|  | voicing their opinions early on in the process. The Discovery meetings |  | updated risks and | Customer |  | [Agenda and Notes](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/Project_Discovery_Meeting_Agenda_and_Notes_Template.dotx) | |  | | | |
|  |  |  |  |  |  |  |  | |  |  |  |
|  | should review the project scope statement (taken from the project |  | issues, better |  |  | can be found in the | | | | | |
|  | proposal), identify missing team members and stakeholders, and the general |  | understanding of |  |  | SharePoint | | | | | |
|  | discussion of schedule, risks, and concerns. |  | scope, and thoughts |  |  | Document Library | | | | | |
|  |  |  | on schedule and |  |  | under Methodology | | | | | |
|  |  |  | resources |  |  | > Project | | | | | |
|  |  |  |  |  |  | Management | | | | | |
|  |  |  |  |  |  | Lifecycle > | | | | | |
|  |  |  |  |  |  | Templates and Forms | | | | | |
|  |  |  |  |  | > | |  |  |  |  |  |
|  |  |  |  |  |  | Project\_Discovery\_m | | | | | |
|  |  |  |  |  |  | eeting\_Agenda\_and\_ | | | | | |
|  |  |  |  |  |  | Notes\_Template.dot | | | | | |
|  |  |  |  |  |  | x | | | | | |
| Identify | Work with key project team members, customers, and project sponsor to | -Project Proposal | - Stakeholder | Project Manager (Owner) |  | [A worksheet for the](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/StakeholderWorksheet.dotx) | | | | | |
|  |  |  |  |  |  |  |  | |  |  |  |
| Stakeholders | identify stakeholders and their expectations. | -Outputs from | worksheet (not for |  |  | [Stakeholder Analysis](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/StakeholderWorksheet.dotx) | | | | | |
|  |  | Discovery Meetings | distribution) |  |  | can be found in the | | | |  | |
|  |  |  |  |  |  | SharePoint | | | | | |
|  |  |  |  |  |  | Document Library | | | | | |
|  |  |  |  |  |  | under Methodology | | | | | |
|  |  |  |  |  |  | > Project | | | | | |
|  |  |  |  |  |  | Management | | | | | |
|  |  |  |  |  |  | Lifecycle > | | | | | |
|  |  |  |  |  |  | Templates and Forms | | | | | |
|  |  |  |  |  | > | |  |  |  |  |  |
|  |  |  |  |  |  | StakeholderWorkshe | | | | | |
|  |  |  |  |  |  | et.dotx | | | | | |
| Create | The Project Communication plan is created by the project team early in | -Project Proposal | - Communication | Project Manager (Owner) |  | [A template for the](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/TEMPLATE-ProjectCommunicationPlan.dotx) | | | | | |
|  |  |  |  |  |  |  |  | | | |  |
| Communication | project to indicate their agreement on how the team will communicate | -Stakeholder Analysis | Plan | Project Sponsor |  | [Communication Plan](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/TEMPLATE-ProjectCommunicationPlan.dotx) | | | | |  |
| Plan | important information during the project - status, meetings, issues, |  |  | Customer |  | can be found in the | | | | | |
|  | deliverables access, and design/ document reviews. It is recommended that |  |  |  |  | SharePoint | | | | | |
|  | this plan is completed early enough to be included for review at the Project |  |  |  |  | Document Library | | | | | |

Page 11 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Initiation Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** |  | **Description** | |  | **Inputs** |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | | | | |  |
|  |  | Kick-off Meeting. | |  |  |  |  |  |  |  |  |  | under Methodology | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | > Project | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Management | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Lifecycle > | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | > TEMPLATE- | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | ProjectCommunicati | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | onPlan.dotx | | | | | | |  |
| Create Project |  | The project charter acts to define a number of key project elements | |  | - Project Proposal |  | - Project Charter |  |  | Project Manager (Owner) |  |  | [A template for the](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/Project_Charter_Template.dotx) | | | | | |  |  |
| Charter |  | including a project description, scope definition, and role/responsibility | |  | -Outputs from |  |  |  |  | Project Sponsor |  |  | [Project Charter](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/Project_Charter_Template.dotx) can | | | | | | |  |
|  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |
|  |  | definition. The documentation and review of these key project elements on | |  | Discovery Meetings |  |  |  |  | Customer |  |  | be found in the | | | | | | |  |
|  |  | the front end of the project helps to avoid misunderstandings or confusion | |  |  |  |  |  |  |  |  |  | SharePoint | | | | | | |  |
|  |  | later in the project and sets a baseline for high-level expectations. | |  |  |  |  |  |  |  |  |  | Document Library | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | under Methodology | | | | | | |  |
|  |  | The following are components of and are defined in the project charter: | |  |  |  |  |  |  |  |  |  | > Project | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Management | | | | | | |  |
|  |  | Project scope |  |  |  |  |  |  |  |  |  | Lifecycle > | | | | | | |  |
|  |  |  | Work and project processes (includes change management |  |  |  |  |  |  |  |  |  | Templates and Forms | | | | | | |  |
|  |  |  | process) |  |  |  |  |  |  |  |  | > | |  |  |  |  |  |  |  |
|  |  |  | Risks |  |  |  |  |  |  |  |  |  | Project\_Charter\_Tem | | | | | | |  |
|  |  |  | Impacts, dependencies, & assumptions |  |  |  |  |  |  |  |  |  | plate.dotx | | | | | | |  |
|  |  |  | Preliminary estimates |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Project team |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | |  |  |  |  |  |  |  |  |  |  | |  | |  | | |  |
| Conduct Project |  | The main goal of the project kick-off meeting is to familiarize the project | |  | - Project Charter |  | - Meeting Minutes |  |  | Project Manager (Owner) |  |  | [A template for the](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/Project_Kickoff_Meeting_Agenda_and_Notes_Template.dotx) | | | | | | |  |
| Kick-off Meeting |  | team with the project, review the project charter, change management and | |  | - Communication |  | -Final Project Charter |  |  | Project Sponsor |  |  | [Project Kick-off](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/Project_Kickoff_Meeting_Agenda_and_Notes_Template.dotx) | | |  | |  | |  |
|  |  | communications plans and receive buy-in from all project participants. | |  | Plan |  | -Final |  |  | Customer |  |  | [Meeting](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/Project_Kickoff_Meeting_Agenda_and_Notes_Template.dotx) can be | | | | | | |  |
|  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  | |  | | |  |
|  |  | Future meeting schedules will be defined and discussed and meeting | |  |  |  | Communication Plan |  |  | Analyst |  |  | found in the | | | | | | |  |
|  |  | minutes will be documented. | |  |  |  | -Initial draft of tasks |  |  | Development |  |  | SharePoint | | | | | | |  |
|  |  |  |  |  |  |  | as inputs to planning |  |  | Quality Assurance |  |  | Document Library | | | | | | |  |
|  |  | For large or high risk projects there will be enhanced requirements regarding | |  |  |  | phase |  |  |  |  | under Methodology | | | | | | |  |
|  |  |  |  |  |  |  | Security |  |  |  |
|  |  | project monitoring and control. The procedures as described in the next | |  |  |  |  |  |  |  |  | > Project | | | | | | |  |
|  |  |  |  |  |  |  |  | Deployment |  |  |  |
|  |  | section should be reviewed at the project kick-off meeting so there is an | |  |  |  |  |  |  |  |  | Management | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | understanding of these requirements as well. | |  |  |  |  |  |  | Operations |  |  | Lifecycle > | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  | Architecture |  |  | Templates and Forms | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  | UA Technology Organizations |  | > | |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Project\_Kickoff\_Mee | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  | Decision Support |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | ting\_Agenda\_and\_N | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  | Portfolio Management Office |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | otes\_Template.dotx | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ongoing activity: |  | Throughout the course of a project there are a number of recurring activities | |  | -Communication Plan |  | -Various |  |  | Project Manager (Owner) |  |  | Templates for | | | | | | |  |
| Communicate |  | related to communication. These include the activities identified in the | |  |  |  | communication |  |  | Project Team |  |  | various types of | | | | | | |  |
| (Implement |  | communication plan, which typically consist of: | |  |  |  | outputs per the |  |  | Portfolio Management Office |  |  | meetings and | | | | | | |  |
| Communication |  |  |  |  |  |  | Communication Plan |  |  |  |  |  | resulting notes can | | | | | | |  |
| Plan) |  | Weekly project team status reports (Template provided which |  |  |  |  |  |  |  |  |  | be found in the | | | | | | |  |
|  |  |  | offers a standardized agenda for status meetings throughout the |  |  |  |  |  |  |  |  |  | [SharePoint](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2fdepartments%2faits%2fdocumentcenter%2fMethodology%2fProject%20Management%20Lifecycle%2fTemplates%20and%20Forms&Folder) | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  | |  | | |  |
|  |  |  | course of a project) |  |  |  |  |  |  |  |  |  | [Document Library](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2fdepartments%2faits%2fdocumentcenter%2fMethodology%2fProject%20Management%20Lifecycle%2fTemplates%20and%20Forms&Folder) | | | |  | | |  |
|  |  | Maintaining SharePoint workspace with meeting agendas, |  |  |  |  |  |  |  |  |  | as well as guides to | | | | | | |  |
|  |  |  | minutes, decisions, documentation, and status reports. |  |  |  |  |  |  |  |  |  | using Clarity and | | | | | | |  |
|  |  |  | Project sponsor meetings for reviewing significant project plan |  |  |  |  |  |  |  |  |  | SharePoint | | | | | | |  |
|  |  |  | changes and progress |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Informal communication: walk-abouts, hallway conversations, |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | and personal emails |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | There are enhanced processes and requirements regarding project | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 12 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Initiation Phase*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** | **Description** | |  | **Inputs** | **Outputs** | **Owner / Participant** | **Links / Notes** |
|  | monitoring and control for large projects (those with greater than 5,000 | | |  |  |  |  |
|  | hours of effort or $250,000) or any projects deemed of sufficient risk. These | | |  |  |  |  |
|  | should be identified in the project communication plan, but are outlined | | |  |  |  |  |
|  | here as well. | |  |  |  |  |  |
|  | For these projects it is advisable that a Steering Committee or Oversight | | |  |  |  |  |
|  | Group be formed to monitor the project execution and collaborate on key | | |  |  |  |  |
|  | project decisions. Templates for Large Projects are included as follows: | | |  |  |  |  |
|  |  | Steering Committee Reporting Template – This is a reporting | |  |  |  |  |
|  |  | package for periodic steering committee meetings and includes | |  |  |  |  |
|  |  | standardized sections for: | |  |  |  |  |
|  |  | o | Project Timeline |  |  |  |  |
|  |  | o | Significant Event Review |  |  |  |  |
|  |  | o | Significant Risks / Issues |  |  |  |  |
|  |  | o | Metric Tracking |  |  |  |  |
|  |  | o | Change Request and Defect Tracking |  |  |  |  |
|  |  | o | Budget Report |  |  |  |  |
|  |  | o | Other |  |  |  |  |
|  |  | Large Project Budget Workbook – This is a multi-tabbed Excel | |  |  |  |  |
|  |  | spreadsheet for tracking actual versus budgeted costs for | |  |  |  |  |
|  |  | internal/external labor and non-labor items. | |  |  |  |  |
|  | All projects of this nature will have a unique set of circumstances which will | | |  |  |  |  |
|  | require extensive customization of the communication plan. | | |  |  |  |  |

**Software Development Life Cycle documentation begins on the following page.**

Page 13 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0*

**Software Development Life Cycle**

**Version 2.0**

Page 14 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0*

**Overview**

The purpose of a Software Development Life Cycle methodology is to provide a documented description of how software is built by . It describes the various phases of the development process and the activities performed by individuals during each phase. It is not meant to be a cookbook approach to software development, but a guide to the best practices and procedures used at for various activities. As software development projects are executed, the SDLC serves as reference to determine which activities are needed for that particular project and provide detailed information on how to accomplish those activities; not every activity listed defined within the SDLC is required by every project. Furthermore, the SDLC provides access to the necessary templates and documented procedures associated with those activities.

The SDLC was developed by the Software Engineering Process Group (SEPG) established by to identify software development processes and practices at that work well, need improvement, or don’t exist. This group serves to prioritize the practices that require the most attention and identify the appropriate resources to focus on the process improvements. The process owners are those groups who are the key participants of the process. For more information regarding the SEPG and the approach used to develop the SDLC, refer to the following documents:

[SDLC Approach](https://cvs.admin.uillinois.edu/aits/documentation/SDLC/AITS_SDLC_Approach.rtf?rev=HEAD)

[SEPG Guiding Principles](https://cvs.admin.uillinois.edu/aits/documentation/SDLC/SEPGGuidingPrinciples.rtf?rev=HEAD)

The SDLC is a constantly evolving collection of processes and templates and is meant to improve as better ways of building software are identified. Questions or suggestions regarding the contents of this document should be referred to the SEPG [(SEPG@uillinois.edu](mailto:AITSSEPG@uillinois.edu)).

**How to Read This Document**

The SDLC is comprised of eight major phases: Planning, Analysis, Design, Construction, Testing, Training, Deployment, and Close. For each phase, this document provides a single page swim lane diagram that depicts the various activities performed by the groups and a general order of events for the entire phase. Since the software development process is fluid, the order of events may not always be the same and certain components of a project may be in one phase while others are in a different phase. Following each diagram is a matrix that provides a more detailed description of each activity in the phase and links to various processes, procedures, and templates that further define that function. Each activity illustrated on the single page swim lane overview has a corresponding entry in the subsequent matrix.

The following table defines the symbols used within the diagrams:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Symbol** |  | **Description** |  |
|  |  |  | Represents an activity performed during the particular phase. If there are no arrows |  |
|  |  |  | in the beginning or end of the activity, then it is started and completed during the |  |
|  |  |  | phase. The activity may have many participants from various groups, but the |  |
|  | Activity Description |
|  |  | activity is shown within the lane of the primary owner of that activity. If there are |  |
|  |  |  |  |
|  |  |  | multiple groups that participate in this activity and is a major part of the group’s |  |
|  |  |  | responsibilities, then it may appear in multiple lanes. |  |
|  |  |  | Same as above, however, the arrows indicate that this activity is performed in the |  |
|  | Activity |  | previous phase and is carried over to the current phase. |  |
|  |  |  |  |  |
|  |  |  | Page 15 of 67 | |



*Project Management Life Cycle: Software Development Life Cycle 2.0*

|  |  |  |
| --- | --- | --- |
|  | **Symbol** | **Description** |
|  |  | Same as above, however, the arrows indicate that this activity is started in this |
|  | Activity | phase and is carried over to the next phase. |
|  |  |  |

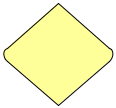


Same as above, however, the arrows indicate that this activity is performed in both the previous phase and the next phase.

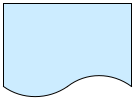


Activity

Review



Point



Phase

Deliverable

This represents a formal review step within the phase. The review points determine if the work product is ready to move to the next phase.

This represents a document or deliverable that is produced as the result of the activity. These are used as either final work products or inputs into other activities.

This symbol is used for on-page connectors to show hand-offs and dependencies

1. between activities between groups.

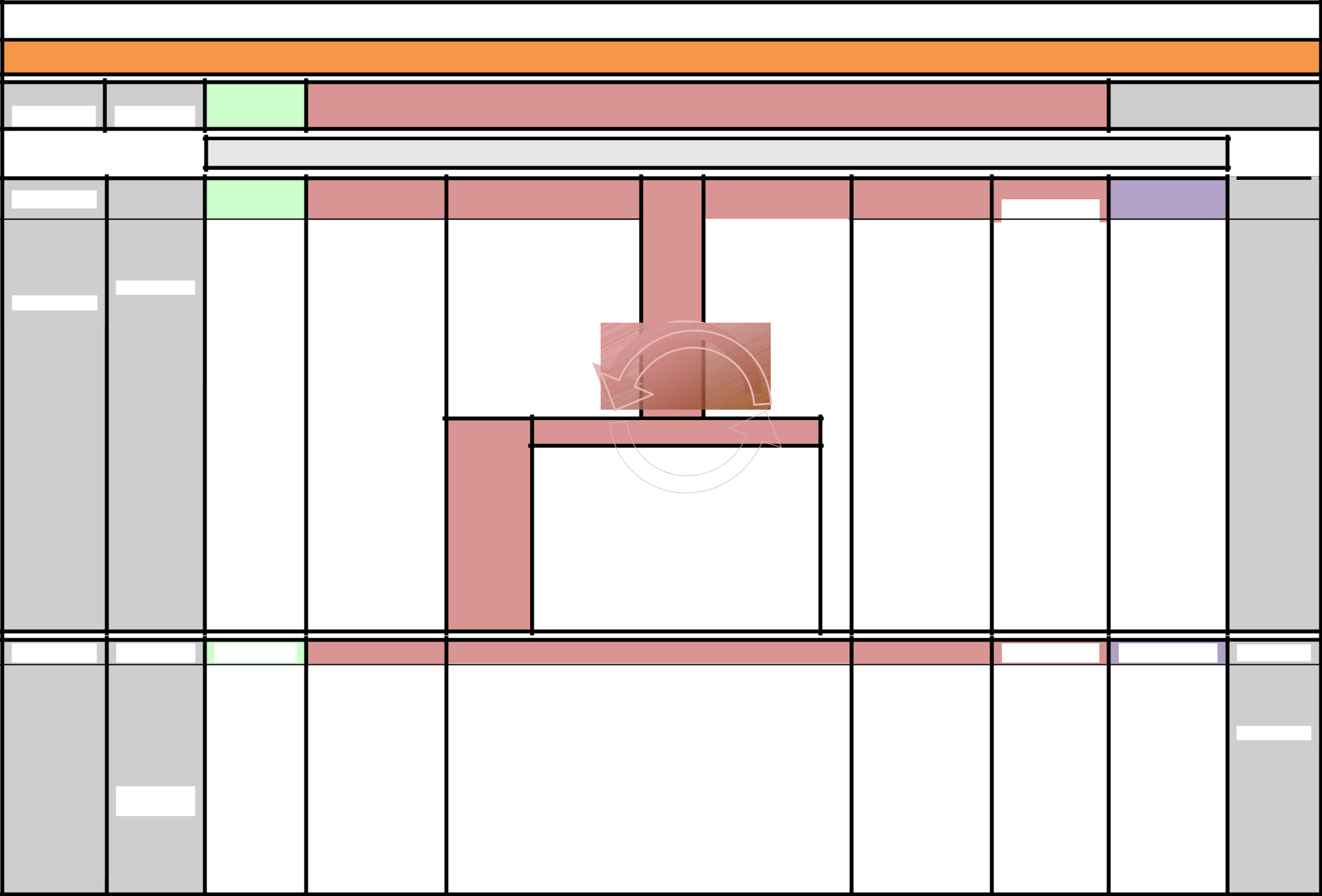


It is important that the SDLC documentation focus on the relationship between activities and owners of the activities based upon role and functions instead of organizational structure. If the SDLC is tied closely to organizational structures within , then it susceptible to revisions whenever there are organizational changes within . It is also common for participants in a project to perform a particular role for one project and a different role in another project. For example, a technical analyst may perform the duties of an analyst and a project manager for one project and may serve as the customer in another. Therefore, it is important to make these roles general in nature and not a byproduct of the current organizational structure. However, as organizational changes occur, the SDLC should be reviewed to ensure that the depiction of roles and descriptions of activities are still accurate.

Within the matrix, key participants and owners have been identified who may participate in each activity. There may be other participants within the activities that are not necessarily reflected in the high level process documentation presented within the SDLC. As the project charter and project plan are developed, a detailed assignment of resources will be done for the required activities using the SDLC documentation as an aid in determining the proper resources to assign to a task.

Page 16 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Planning Phase*

**

**– Project Management Life Cycle – Software Development Projects**

**Project Management Life Cycle**

**1 Project**

**Origination**

**2 Project**

**Initiation**

|  |  |  |
| --- | --- | --- |
| **3 Project** | **4 Project Execution and Control** | **5 Project Closeout** |
| **Planning** |  |
|  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **Software Development Life Cycle** | |  |  |  |  |
| **1 Origination** | **2 Initiation** | **3.0 Planning** | **4.1 Analysis** | **4.2 Design** | | **4.4 Testing** | **4.5 Training** | **4.6** | **5.1 Close** | **5.2 Post** |
| **Deployment** | **Close** |
|  |  |  |  |  |  |  |  |  |
| - ITPC Template | -Discovery | - Project Plan in | - Business Rules | - DWG Design | - Technical Design | - Technical Design Review | - Training Environment | - Application | - Post Deployment | - Post Project |
| - Project Review | meetings | Clarity | - DWG Design Collaboration | Collaboration | Review | - QA Master Test Plan | - Artifact Staging | Deployment Checklist | Review | Survey |
| - Project Approval | -Stakeholder | (WBS, Resources, | - Application Design | - Style Guides | - QA Master Test | - Training Plan | - Training Security Setup | - Artifact Staging | - Environment Review |  |
| - Project Creation | analysis | Estimates, and | - Integration Design | - Service Guides | Plan | - Hardware / Software Order | - Customer Training | - Dress Rehearsal | and Cleanup |  |
| - Priority Setting | - Communication | Schedule) | - Conversion Strategy | - Technical | - Training Plan | Communicate | -Communicate | - Change Control | - Stakeholder |  |
| - Project Scheduling | plan | - Project planning | - EAC Review | Design | - Hardware / | -Monitor and Control | -Monitor, Control, and | - Event Notice | Satisfaction Survey |  |
|  | - Project Charter | meetings with | - Security Review | - EAC Review | Software Order | - Manage Change Requests | Manage Change | - System Deployment | - Post Project Review |  |
|  | - Project Kick Off | team | - Application Design Review | - Security | Communicate |  |  | - Production Readiness | - Final Project |  |
|  | -Communication | - PMO / SMT Sign- | - Training Strategy | Review | -Monitor and Control | |  | Test | Documentation Review |  |
|  | activities | Off | - Testing Strategy | - Sensitive Data | - Manage Change |  |  | - Go / No Go Decision | - Short Term Post |  |
|  |  | -Final project plan | -- Communicate | Usage Form | Requests |  |  | - Communicate | Project Support |  |
|  |  | review and | -Monitor, Control, and |  |  |  |  | -Monitor, Control, and | - Production Support |  |
|  |  | approval with team | Manage Change |  |  |  |  | Manage Change |  |  |
|  |  | -Baseline project |  |  |  | **4.3 Construction** |  |  |  |  |
|  |  | - Deployment Plan |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

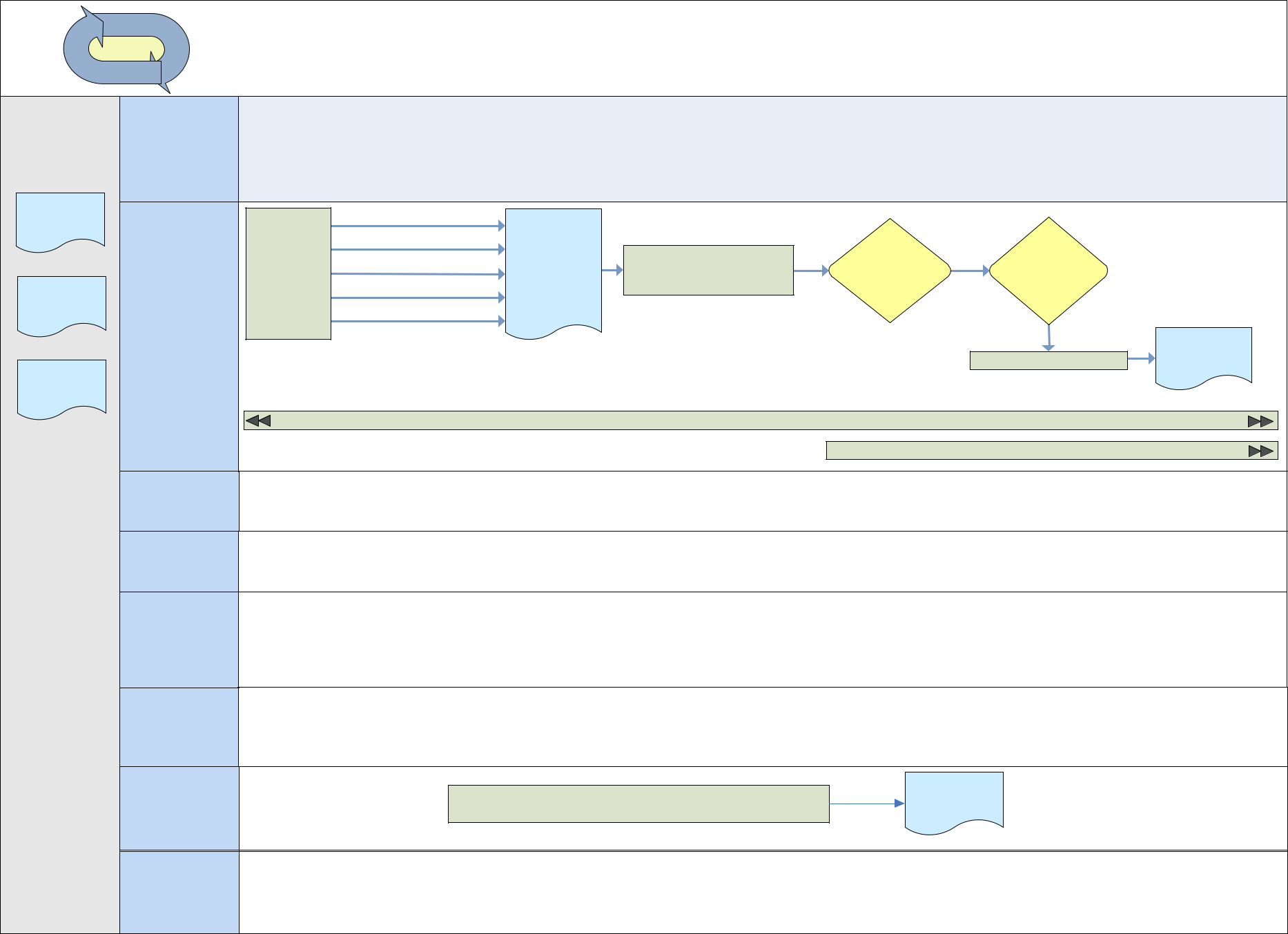
|  |  |
| --- | --- |
| - EAC Review | - User Guides / Help Materials |
| - Development | - Communicate |
| - System Test Plan | -Monitor and Control |
| - Functional Test | - Manage Change Requests |
| - QA Test Cases / Scripts | - Hardware / Software |
| - QA Functional Test | Installation |
| - Performance Test Plan | - Infrastructure Deployment |
| - Performance Test | - Development / Unit Test Cycle |
| - Security Scans | - Show and Tell |
| - Customer Test Plan | - DWG Design |
| - Alpha Test | - Code Review |
| - Training Materials | - Defect Management |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Participants** | **Participants** | **Participants** | **Participants** |  | **Participants** | **Participants** | **Participants** | **Participants** | **Participants** |
| - AAMT | - AFM | - Analyst | - Analyst | - Analyst | - Operations | - Analyst | - Analyst | - Analyst | - Customer |
| - ADSD Managers | - Analyst | - Architecture | - Architecture | - Architecture | - Project Manager | - Customer | - Customer | - Architecture | - PMO |
| - Architecture | - Architecture | - Customer | - Customer | - Customer | - Project Sponsor | **- Deployment** | - Deployment | - Customer | - Project |
| - COE Managers | - Customer | - Deployment | - Deployment | - Deployment | - Quality Assurance | **- Development** | - Development | - Deployment | Manager |
| - EAC | - Deployment | - Development | - Development | - Development | - Security | **- Project Manager** | - Operations | - Development | - Project Sponsor |
| - ITPC | - Development | - Operations | - Development Working | - Development Working Group | - Training Team | **- Security** | - Project Manager | - Operations |  |
| - ITPC | - Operations | - PMO | Group |  |  |  | - Project Sponsor | - PMO |  |
| Subcommittees | - PMO | - Project Manager | - Operations |  |  |  | - Quality Assurance | - Project Manager |  |
| - PMO | - Project Manager | - Project Sponsor | - Project Manager |  |  |  | - Security | - Project Sponsor |  |
| - Project Sponsor | - Project Sponsor | - Quality Assurance | - Project Sponsor |  |  |  |  | - Project Team |  |
| - SMT | - Quality | - Security | - Quality Assurance |  |  |  |  | - Quality Assurance |  |
| - UA Technology | Assurance | - SMT | - Security |  |  |  |  | - Security |  |
| Organizations | - Security | - Technical Lead | - Training Team |  |  |  |  |  |  |
|  | - UA Technology |  |  |  |  |  |  |  |  |
|  | Orgs |  |  |  |  |  |  |  |  |

Page 17 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Planning Phase*

**Planning Phase**

****

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 3.0 Planning | |  |  |  |
| ***Software Development Lifecycle*** | |  |  |  |  |
|  | **SDLC** |  |  |  |  |
|  |  |  |  |  |  |  |
| Phase |  |  |  |  |  |  |  |
| Inputs | **Customer** |  |  |  |  |  |  |
| Project |  |  |  |  |  |  |  |
| Proposal / |  | Revised task list |  |  |  |  |  |
| ITPC | Develop | Resource assignments | Draft project |  |  |  |  |
|  |  |  |  |  |
|  | project |  | Project planning | PMO review, | Final project |  |
|  | Revised estimates | plan in Clarity |  |
|  | plan in | revisions and | plan review and |  |
|  |  |  | meeting with team |  |
|  | Clarity | Schedule |  | approval | approval |  |
| Project |  |  |  |
|  |  |  |  |  |  |  |
| Charter |  | Financial plan |  |  |  |  |  |
|  | **Project** |  |  |  |  |  | Approved |
|  | **Manager** |  |  |  |  |  |
|  |  |  |  |  |  | Baseline Project | project plan |
| Communication | |  |  |  |  |  |  |
| Plan |  |  |  |  |  |  |  |
|  |  |  |  | Communication |  |  |  |
|  |  |  |  |  | Monitor and Control | |  |
|  | **Analyst** |  |  |  |  |  |  |
|  | **Development** |  |  |  |  |  |  |
|  | **Quality** |  |  |  |  |  |  |
|  | **Assurance** |  |  |  |  |  |  |
|  | **Security** |  |  |  |  |  |  |
|  |  |  |  |  | Application |  |  |
|  | **Deployment** |  | Develop Application Deployment Plan | | Deployment |  |  |
|  |  |  |  | Plan |  |  |
|  |  |  |  |  |  |  |
|  | **Operations** |  |  |  |  |  |  |

Page 18 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Planning Phase*

**Phase 3.0 - Planning**

The purpose of the Planning Phase is to develop a detailed and complete work plan for the project that can be used by all stakeholders as a roadmap for project execution. The project proposal from Phase 1: Origination and the project charter from Phase 2: Initiation are used as starting points to create the project plan and start the deployment planning process through identifying hardware and software purchases that will need to be made in order for development to begin.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner /** | **Links / Notes** | | |  |
|  |  |  |  |  |  |  |  |  |  |  | **Participant** |  |  |  |  |
| Develop Project | Creating the project plan provides a roadmap for effective project planning | |  |  | - Project Proposal |  |  | - Within Clarity, the |  |  | Project Manager (Owner) | There are a number of | | |  |
| Plan | and execution, and becomes a tool for monitoring progress throughout the | |  |  | - Project Charter |  |  | following |  |  | Portfolio Management | pre-populated project | | |  |
|  | project. The project plan documents the project tasks, deliverables, | |  |  | - Project Plan |  |  | information is |  |  | Office | plan templates available | | |  |
|  | milestones, schedule, participants and budget and should facilitate | |  |  | Template |  |  | required to have a |  |  |  | in Clarity. Typically your | | |  |
|  | communication among project stakeholders. The project plan is a living | |  |  |  |  |  | project plan |  |  |  | project will be set up | | |  |
|  | document that will be consulted and modified throughout the life of the | |  |  |  |  |  |  |  |  |  | with one of these plans | | |  |
|  | project as factors within and outside the project affect the project elements. | |  |  |  |  |  | 1.Work Breakdown |  |  |  | as a starting point. | | |  |
|  |  |  |  |  |  |  |  | Structure |  |  |  |  |  |  |  |
|  | While the project plan is the ultimate responsibility of the project manager, | |  |  |  |  |  | 2. Resources |  |  |  | For more details on the | | |  |
|  | input from the entire project team and key client personnel will be required | |  |  |  |  |  | assigned to tasks |  |  |  | Project Manager’s | | |  |
|  | for its development. The project plan is established and maintained in | |  |  |  |  |  | 3. Estimates |  |  |  | responsibilities during | | |  |
|  | Clarity. | The activities described in this documentation will not be |  |  |  |  |  | provided for each |  |  |  | the Planning Phase, | | |  |
|  | applicable for all projects depending on the nature and size of a project. The | |  |  |  |  |  | task |  |  |  | please see the Planning a | | |  |
|  | project manager will need to work with the project team, technical leads | |  |  |  |  |  | 5. Start and end |  |  |  | Project course materials | | |  |
|  | and PMO to determine which tasks would not be applicable in certain | |  |  |  |  |  | dates for the tasks, |  |  |  | and related guides in the | | |  |
|  | instances. | |  |  |  |  |  | and start, finish, |  |  |  | [Sharepoint Document](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | | |  |
|  |  |  |  |  |  |  |  | requested |  |  |  | [Library.](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | |  |  |
|  | The project plan is recorded in a series of forms in Clarity. The following | |  |  |  |  |  | implementation, and |  |  |  |  |  |  |  |
|  | activities are required to complete the project plan. Please note that these | |  |  |  |  |  | implementation |  |  |  | Intranet: | | |  |
|  | activities are highly interdependent. | |  |  |  |  |  | dates for the project |  |  |  | Documentation Library > | | |  |
|  |  |  |  |  |  |  |  | 6. Critical path for |  |  |  | Methodology > Project | | |  |
|  | **-- Task identification and organization (aka Work Breakdown Structure)**: | |  |  |  |  |  | project |  |  |  | Management Lifecycle | | |  |
|  | The Work Breakdown Structure (WBS) is a detailed hierarchal tree structure | |  |  |  |  |  | 7. Financial plan |  |  |  |  |  |  |  |
|  | of deliverables and tasks that need to be performed to complete a project. | |  |  |  |  |  | (entered by the |  |  |  | Here is a link to the | | |  |
|  | Steps in creating the WBS would include: | |  |  |  |  |  | PMO) |  |  |  | PMLC/SDLC Project Plan | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Template located in | | |  |
|  | o | Identification of major steps and milestones |  |  |  |  |  |  |  |  |  | Clarity. | | |  |

1. Sequence the major steps

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| o | Identify known dependencies between tasks and deliverables | [https://clarity.apps.uillin](https://clarity.apps.uillinois.edu/niku/app?action=projmgr.projectProperties&id=5022276) | | |  |  |
| o | Identification of detailed steps and milestones | [ois.edu/niku/app?action](https://clarity.apps.uillinois.edu/niku/app?action=projmgr.projectProperties&id=5022276) | |  | |  |
|  |  | [=projmgr.projectProperti](https://clarity.apps.uillinois.edu/niku/app?action=projmgr.projectProperties&id=5022276) | | | |  |
| **--Assigning resources to tasks** : This activity includes identifying the project | | [es&id=5022276](https://clarity.apps.uillinois.edu/niku/app?action=projmgr.projectProperties&id=5022276) | | | |  |
| participants and applying these resources or roles into the project plan | |  |  |  |  |  |
| against the appropriate tasks and deliverables for which they will be | |  |  |  |  |  |
| responsible. The staff assigned to a project may be identified early in the | |  |  |  |  |  |
| project, before the project plan is developed or as a result of requirements | |  |  |  |  |  |
| developed in the project plan and other planning. As early as possible, | |  |  |  |  |  |
| project managers should consult with the respective team leads to identify | |  |  |  |  |  |

Page 19 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Planning Phase*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** | **Description** | **Inputs** | **Outputs** |  | **Owner /** |  |  | **Links / Notes** |
|  |  |  |  |  | **Participant** |  |  |  |
|  |  |  |  |  |  |  |  |
|  | the resources to be assigned to their projects. Ideally, resources should be |  |  |  |  |  |  |  |
|  | identified prior to the project kick-off meeting in the initiation phase so that |  |  |  |  |  |  |  |
|  | they may participate and provide input early in the project. As these |  |  |  |  |  |  |  |
|  | individuals are identified, they should be documented in the project plan in |  |  |  |  |  |  |  |
|  | place of generic role placeholders (i.e. Application Developer, Technical |  |  |  |  |  |  |  |
|  | Analyst, etc…). A consideration in creating the project schedule and staffing |  |  |  |  |  |  |  |
|  | plan is that they are very interdependent. The availability of additional |  |  |  |  |  |  |  |
|  | resources may translate into a shortened project schedule. Conversely, |  |  |  |  |  |  |  |
|  | scarce resources may extend the project schedule. If there are dates in the |  |  |  |  |  |  |  |
|  | project schedule that are immovable, then resources must be allocated |  |  |  |  |  |  |  |
|  | accordingly to meet the required schedule. In the absence of hard |  |  |  |  |  |  |  |
|  | scheduling requirements, the project manager should adjust the project |  |  |  |  |  |  |  |
|  | schedule to fit the resources available to the project. |  |  |  |  |  |  |  |
|  | **--Estimating effort for tasks** : Once the WBS is defined, the project team |  |  |  |  |  |  |  |
|  | must estimate the effort needed to perform the tasks identified. Usually |  |  |  |  |  |  |  |
|  | there will already be a higher-level estimate that has been prepared as part |  |  |  |  |  |  |  |
|  | of the Project Proposal. While this estimate may be used as a reference, it |  |  |  |  |  |  |  |
|  | should not be the basis for the estimates in the project plan. The project |  |  |  |  |  |  |  |
|  | manager should develop the task effort estimates based on the team’s |  |  |  |  |  |  |  |
|  | knowledge of the project requirements, prior experience and the advice of |  |  |  |  |  |  |  |
|  | others on the project team and in the department. It is best to get |  |  |  |  |  |  |  |
|  | estimates from the team members that will be doing the work. |  |  |  |  |  |  |  |
|  | **--Scheduling** : Once the work has been defined and the required effort has |  |  |  |  |  |  |  |
|  | been estimated, the project manager will create the project schedule. The |  |  |  |  |  |  |  |
|  | project schedule should be developed by determining target start and |  |  |  |  |  |  |  |
|  | completion dates for the tasks and deliverables in the project plan. |  |  |  |  |  |  |  |
|  | --**Financial planning**: The financial plan details the project costs for external |  |  |  |  |  |  |  |
|  | resources, equipment, software, and expenses (such as travel and any other |  |  |  |  |  |  |  |
|  | project expenditures). For most ITPC projects an initial plan will be entered |  |  |  |  |  |  |  |
|  | into Clarity from the project proposal by the PMO. Actual expenditures will |  |  |  |  |  |  |  |
|  | be entered into Clarity to track against the budget by the PMO. These are |  |  |  |  |  |  |  |
|  | derived from general ledger detail reports on a monthly basis. For very large |  |  |  |  |  |  |  |
|  | projects, a separate detailed cost tracking spreadsheet may be used. The |  |  |  |  |  |  |  |
|  | PMO will provide help developing and maintaining spreadsheets like these |  |  |  |  |  |  |  |
|  | for large projects. |  |  |  |  |  |  |  |
|  | **--Critical Path** : Once the project plan is developed, the project manager |  |  |  |  |  |  |  |
|  | should identify the critical path in the project. The critical path is the |  |  |  |  |  |  |  |
|  | sequence of tasks/deliverables in a project where none of the |  |  |  |  |  |  |  |
|  | tasks/deliverables can be delayed without affecting the final project end |  |  |  |  |  |  |  |
|  | date. By identifying the critical path in a project, the project manager can |  |  |  |  |  |  |  |
|  | pay particular attention to and take needed actions toward the |  |  |  |  |  |  |  |
|  | tasks/deliverables on the critical path to avoid delays to the overall project |  |  |  |  |  |  |  |
|  | schedule. The critical path is driven by the project task dependencies and |  |  |  |  |  |  |  |
|  | milestones in the plan. A PMO team member will assist the project manager |  |  |  |  |  |  |  |
|  | in determining the project critical path if needed. |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Project Planning | The goal of this meeting is to gather input from the project team on the | - Draft Project Plan | - Revised Project |  | Project Manager (Owner) |  |  |  |
| Meeting with | draft project plan. The goal is to review the tasks, deliverables, timelines |  | Plan |  | Portfolio Management |  |  |  |

Page 20 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Planning Phase*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** |  | **Description** | **Inputs** | **Outputs** |  | **Owner /** |  |  | **Links / Notes** |
|  |  |  |  |  |  | **Participant** |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Team | and resource assignments throughout the plan. Reviewing this as a group | |  |  |  | Office |  |  |  |
|  | will ensure understanding among all project participants regarding their | |  |  |  | Project Sponsor |  |  |  |
|  | responsibilities, assigned deliverables and interdependencies between team | |  |  |  | Customer |  |  |  |
|  | members and tasks assigned. This will also provide a forum for questions | |  |  |  | Project Team |  |  |  |
|  | and uncertainties to be discussed so everyone has shared expectations and | |  |  |  |  |  |  |  |
|  | buy-in for the plan to move forward. The project plan should be revised if | |  |  |  |  |  |  |  |
|  | necessary based on the feedback received from this meeting. Meeting | |  |  |  |  |  |  |  |
|  | minutes should be documented to create a record of the participants and | |  |  |  |  |  |  |  |
|  | major points of the meeting. | |  |  |  |  |  |  |  |
|  | This meeting will be lengthy and allow more than an hour to go through all | |  |  |  |  |  |  |  |
|  | the items on the agenda: | |  |  |  |  |  |  |  |
|  |  | Verify WBS |  |  |  |  |  |  |  |
|  |  | Verify estimates |  |  |  |  |  |  |  |
|  |  | Verify assignments |  |  |  |  |  |  |  |
|  |  | Set due dates and schedules |  |  |  |  |  |  |  |
|  | The activities described in this documentation will not be applicable for all | |  |  |  |  |  |  |  |
|  | projects depending on the nature and size of a project. The project manager | |  |  |  |  |  |  |  |
|  | will need to work with the project team, technical leads and PMO to | |  |  |  |  |  |  |  |
|  | determine which tasks would not be applicable in certain instances. | |  |  |  |  |  |  |  |
|  | Prior to the project plan review by the full project team, the appropriate | |  |  |  |  |  |  |  |
|  | TAM lead should review the project plan for completeness to ensure all | |  |  |  |  |  |  |  |
|  | required and appropriate steps from the PMLC / SDLC are included in the | |  |  |  |  |  |  |  |
|  | plan. |  |  |  |  |  |  |  |  |
|  | The project manager should receive and retain an email confirmation of this | |  |  |  |  |  |  |  |
|  | review an approval. | |  |  |  |  |  |  |  |
|  |  | |  |  |  |  |  |  |  |
| PMO Review, | The PMO will review the project plan, suggest revisions, and approve it. | | - Project Proposal | - Revised Project |  | Project Manager (Owner) |  |  |  |
| Revisions, and | For large projects or projects requiring additional rigor in monitoring and | | - Project Charter | Plan |  | Portfolio Management |  |  |  |
| Approval | control, LT must approve the project plan and the PM will need to | | - Communication |  |  | Office |  |  |  |
|  | provide a project presentation to LT during the planning phase of the | | Plan |  |  |  |  |  |  |
|  | project. |  | - Project Plan |  |  |  |  |  |  |
| Final Project Plan | Once the plan is approved by the PMO, the Project Manager should have a | | -Project Plan | -Approved Project |  | Project Manager (Owner) |  |  |  |
| Review and | final project plan review and approval with the project team. This is a | |  | Plan |  | Portfolio Management |  |  |  |
| Approval (with | formal meeting to ensure there is still agreement on the project plan. | |  |  |  | Office |  |  |  |
| project team) |  |  |  |  |  | Project Sponsor |  |  |  |
|  |  |  |  |  |  | Customer |  |  |  |
|  |  |  |  |  |  | Project Team |  |  |  |
|  |  | |  |  |  |  |  |  |  |
| Create Project | Once the project plan has been created and reviewed with the appropriate | | - Project Plan | - Project Plan with |  | Project Manager (Owner) |  |  |  |
| Baseline | project stakeholders, the project plan baseline should be created. The | |  | initial baseline |  | Portfolio Management |  |  |  |
|  | project plan baseline creates a permanent record of the original project plan | |  |  |  | Office |  |  |  |
|  | so that performance against the plan can be measured and monitored | |  |  |  |  |  |  |  |
|  | throughout the duration of the project. Monitoring performance against | |  |  |  |  |  |  |  |
|  | the schedule and budget of a project can provide valuable feedback during a | |  |  |  |  |  |  |  |
|  | project to allow for project plan adjustment and contingency planning. | |  |  |  |  |  |  |  |
|  | Reflecting on project performance at the conclusion of a project can provide | |  |  |  |  |  |  |  |
|  | effective feedback on the accuracy of estimating techniques and quality of | |  |  |  |  |  |  |  |
|  | project planning. Once the project plan is complete and reviewed, upon the | |  |  |  |  |  |  |  |
|  | advice of the project manager, the PMO will baseline the project plan in | |  |  |  |  |  |  |  |

Page 21 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Planning Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  |  | **Description** |  |  | **Inputs** |  | **Outputs** |  |  | **Owner /** |  | **Links / Notes** | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | **Participant** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Clarity. If the baselined estimates exceed approved estimates by 50% (Level | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 1) or 30% (Level 2), the project must go back to ITPC for additional review. | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Also, for Level 1 projects, if the baseline estimate exceeds 60 days of effort | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | or $100,000, the project must go back to ITPC and AAMT for Level 2 | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | approval. ITPC must also approve any material change in scope, defined as a | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 25% change in project duration or 10% change in resource requirements. If | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | in the course of a project, approved change requests alter the scope and | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | timing of the project plan, the plan may be re-baselined to track against the | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | modified plan. | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Project status updates are due on the 1st and 15th of each month and are | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | reported in Clarity. | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | | |  |  |  |  |  |  |  |  |  |  | |  |  |  | |  |
|  | Develop the |  | The Application Deployment Plan is a comprehensive deployment document | | |  |  | - ITPC Template |  | - Application |  |  | Deployment (Owner) |  | [Application Deployment](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDeploymentTemplate.docx) | | | | |  |  |
|  | Application |  | used throughout the project to prepare the development, test, and | | |  |  | - Project Plan |  | Deployment Plan |  |  | Project Manager |  | [Plan](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDeploymentTemplate.docx) | | | | | |  |
|  | Deployment Plan |  | production infrastructure and to gather data needed for the deployment | | |  |  |  |  |  |  |  | Development |  |  |  |  |  |  |  |  |
|  |  |  | process. This document also identifies the hardware/software needs for the | | |  |  |  |  |  |  |  |  |  | Intranet: | | | | | |  |
|  |  |  | new application as well as the logistics and delivery plans for such | | |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |  |
|  |  |  | components. Identification of these resources at this stage will allow the | | |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |  |
|  |  |  | Operations group to begin to plan for the acquisition or provisioning of the | | |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | |  |
|  |  |  | equipment. In subsequent phases, this assessment will be refined and the | | |  |  |  |  |  |  |  |  |  | pplicationDeploymentTe | | | | | |  |
|  |  |  | actual products will be ordered. | | |  |  |  |  |  |  |  |  |  | mplate.docx | | | | | |  |
|  |  |  |  | | |  |  |  |  |  |  |  |  |  |  | | | | | |  |
|  | Communication |  | Throughout the course of a project there are a number of recurring activities | | |  |  | -Communication |  | -Various |  |  | Project Manager (Owner) |  | Templates for various | | | | | |  |
|  |  |  | related to communication. These include the activities identified in the | | |  |  | Plan |  | communication |  |  | Project Team |  | types of meetings as well | | | | | |  |
|  |  |  | communication plan, which typically consist of: | | |  |  |  |  | outputs per the |  |  | Portfolio Management |  | as guides to using Clarity | | | | | |  |
|  |  |  |  |  |  |  |  |  |  | Communication Plan |  |  | Office |  | and SharePoint can be | | | | | |  |
|  |  |  |  | Weekly project team status reports (Template provided which |  |  |  |  |  |  |  |  |  | found in the [Sharepoint](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  | |  |
|  |  |  |  |  | offers a standardized agenda for status meetings throughout the |  |  |  |  |  |  |  |  |  | [Document Library.](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | | | | | |  |
|  |  |  |  |  | course of a project) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Maintaining SharePoint workspace with meeting agendas, |  |  |  |  |  |  |  |  |  | Intranet: | | | | | |  |
|  |  |  |  |  | minutes, decisions, documentation, and status reports. |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |  |
|  |  |  |  | Project sponsor meetings for reviewing significant project plan |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | | |  |
|  |  |  |  |  | changes and progress |  |  |  |  |  |  |  |  |  | Management Lifecycle | | | | | |  |
|  |  |  |  |  | Informal communication: walk-abouts, hallway conversations, |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | and personal emails |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

There are enhanced processes and requirements regarding project

monitoring and control for large projects (those with greater than 5,000

hours of effort or $250,000) or any projects deemed of sufficient risk. These

should be identified in the project communication plan, but are outlined

here as well.

For these projects it is advisable that a Steering Committee or Oversight

Group be formed to monitor the project execution and collaborate on key

project decisions. Templates for Large Projects are included as follows:

* Steering Committee Reporting Template – This is a reporting package for periodic steering committee meetings and includes standardized sections for:

o Project Timeline

o Significant Event Review

Page 22 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Planning Phase*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** | **Description** |  | **Inputs** |  | **Outputs** |  |  | **Owner /** |  | **Links / Notes** |
|  |  |  |  |  |  |  |  | **Participant** |  |  |
|  |  |  |  |  |  |  |  |  |  |

1. Significant Risks / Issues o Metric Tracking

o Change Request and Defect Tracking o Budget Report

* 1. Other
* Large Project Budget Workbook – This is a multi-tabbed Excel spreadsheet for tracking actual versus budgeted costs for internal/external labor and non-labor items.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | All projects of this nature will have a unique set of circumstances which will | | | | |  |  |  |  |  |  |  |
|  | require extensive customization of the communication plan. | | | | |  |  |  |  |  |  |  |
| Monitor and | Throughout the course of a project there are a number of recurring | | | | | - Project Charter | -Updated project | Project Manager (Owner) | The PMO Monthly | | | |
| Control | activities related to keeping the project on track and making adjustments to | | | | | - Communication | plan | AFM | Checklist is a good guide | | | |
|  | the plan when needed. At a minimum, these activities include: | | | | | Plan | -Risks, issues, and | Portfolio Management | for monitoring and | | | |
|  |  |  |  |  |  | -Project Plan | change requests in | Office | controlling a project. | | | |
|  |  | Managing risks and issues in Clarity | | |  | Clarity |  |  |  |  |  |
|  |  |  | Manage change requests (see note below) | | |  | -Action items in |  | [PMO Monthly Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/UpdatingAProject-PMOChecklist.pdf) | | | |
|  |  |  | Following up on tasks and enforcing schedule | | |  | SharePoint |  |  |  |  |  |
|  |  |  | Managing action items in SharePoint | | |  |  |  | Intranet: | | | |
|  |  |  | Updating project plan in Clarity: | | |  |  |  | Documentation Library > | | | |
|  |  |  |  | Tasks | |  |  |  | Methodology > Project | | | |
|  |  |  |  | Resources | |  |  |  | Management Lifecycle > | | | |
|  |  |  |  | Schedule | |  |  |  | Guides > | | | |
|  | Complex or large projects may require additional monitoring effort. The | | | | |  |  |  | UpdatingAProject- | | | |
|  |  |  |  | PMOChecklist.pdf | | | |
|  | PMO can help in developing reports and tools to keep your project on | | | | |  |  |  |
|  |  |  |  |  |  |  |  |
|  | budget and on schedule. | | | | |  |  |  | In addition, please see | | | |
|  |  |  |  |  |  |  |  |  |
|  |  | Change requests | | |  |  |  |  | the course materials | | | |
|  |  |  |  | available in the the | | | |
|  | Change requests can be generated during the design, construction and | | | | |  |  |  |
|  |  |  |  | [Sharepoint Document](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | | | |
|  | various testing phases. Change requests are defined as major feature or | | | | |  |  |  |
|  |  |  |  | [Library.](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | |  | |
|  | functionality changes that the customer would like to have included in the | | | | |  |  |  |
|  |  |  |  |  |  |  |  |
|  | system but will impact the scope, budget, or schedule of the project. The | | | | |  |  |  | Intranet: | | | |
|  | SDLC provides an iterative approach where requirements are further | | | | |  |  |  |
|  |  |  |  | Documentation Library > | | | |
|  | defined and changes to the system are anticipated to some extent. For | | | | |  |  |  |
|  |  |  |  | Methodology > Project | | | |
|  | larger changes, a more formal change request process should be followed. | | | | |  |  |  |
|  |  |  |  | Management Lifecycle | | | |
|  |  |  |  |  |  |  |  |  |

Change requests are managed by a process that includes prioritizing the

request, estimating the amount of work required to include the request in

the system, and setting expectations regarding when the change request

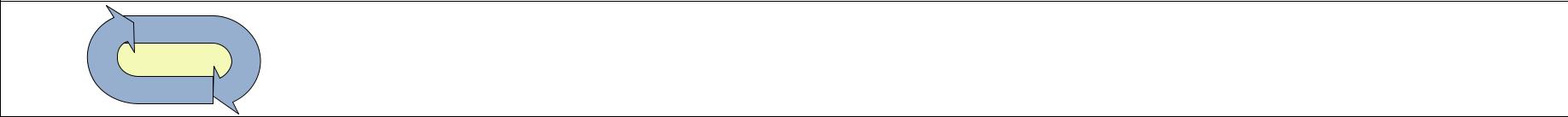
work will be scheduled. Change requests require the re-initiation of the unit

testing, deployment, and detailed testing cycle.

Page 23 of 67

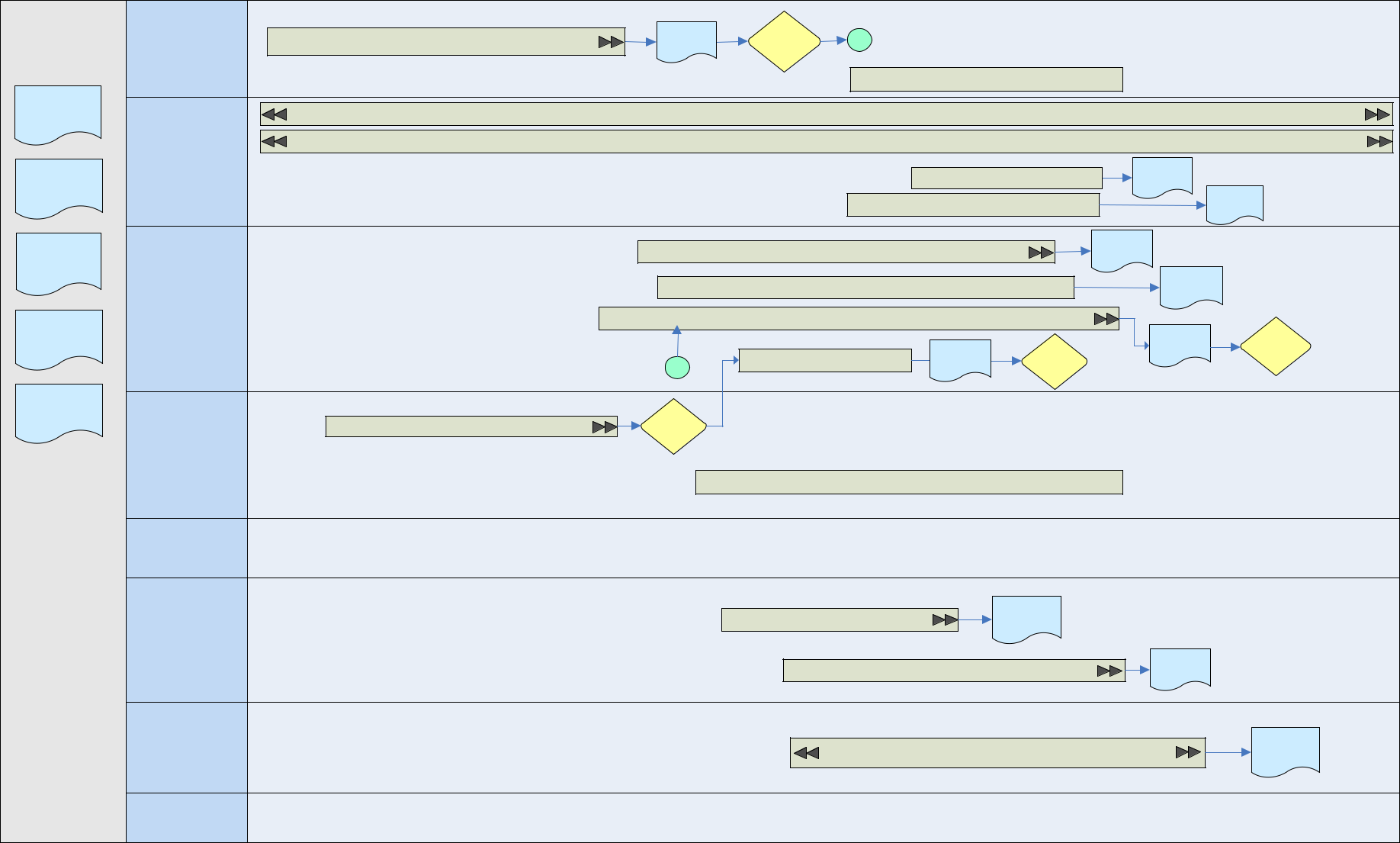
*Project Management Life Cycle: Software Development Life Cycle 2.0: Design Phase*

**Analysis Phase**

****

|  |  |
| --- | --- |
| ***Life Cycle*** | 4.1 Analysis |
| ***Software Development*** |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **SDLC** |  |  |  |  |  |  |  |  |
| Phase |  |  | Business | Business |  |  |  |  |  |
| Inputs |  | Define Business Rules | 1 |  |  |  |  |
|  | Rules |  |  |  |  |
| **Customer** | Rule Review |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  | Review Application Design | |  |  |
| Project |  |  |  | Communication | |  |  |  |  |
| Plan |  |  |  |  |  |  |  |
|  |  |  |  | Monitor and Control | |  |  |  |  |
| Project | **Project Manager** |  |  |  |  |  |  | Training |  |
|  |  |  |  |  | Develop Training Strategy | |  |
|  |  |  |  |  | Strategy |  |
| Charter |  |  |  |  | Develop Testing Strategy | | |  | Testing |
|  |  |  |  |  |  |
|  |  |  |  |  |  | Strategy |
| Application |  |  |  |  |  |  |  | Integration |  |
|  |  | Develop Integration / Enterprise Objects Template | | | | | / EO |  |
| Deployment |  |  | Templates |  |
|  |  |  |  |  |  |  |  |
| Plan |  |  |  |  |  |  |  | Conversion | |
|  |  |  |  | Develop Conversion Strategy | | |  |
|  |  |  |  |  | Strategy |  |
|  | **Analyst** |  |  | Develop Application Design | | |  |  |  |
| Communic- |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Application | Application |
| ation Plan |  |  |  |  |  |  |  |
|  |  |  |  |  | Application |  | Design | Design |
|  |  |  |  |  |  | EAC |
|  |  |  |  | Schedule EAC Review | |  | Review |
|  |  |  | 1 | Design |  |
|  |  |  | Review |  |
|  |  |  |  |  |  |  |  |
| Project |  |  |  |  |  |  |  |  |  |
| Proposal / |  |  | EAC |  |  |  |  |  |  |
| ITPC |  | Conduct DWG Design Collaboration |  |  |  |  |  |  |
|  | Review | Yes |  |  |  |  |  |
|  |  |  | Needed? |  |  |  |  |  |  |
|  | **Development** |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Review Application Design | |  |  |  |
|  | **Quality** |  |  |  |  |  |  |  |  |
|  | **Assurance** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Security |  |  |
|  |  |  |  | Conduct Security Review | | | Review |  |  |
|  |  |  |  | Template |  |  |
|  |  |  |  |  |  |  |  |  |
|  | **Security** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | Access |  |
|  |  |  |  |  | Conduct Baseline Access Control Review | | | Req / |  |
|  |  |  |  |  | Controls |  |
|  |  |  |  |  |  |  |  |  |
|  | **Deployment** |  |  |  |  |  |  |  | Application |
|  |  |  |  | Revise Application Deployment Plan | | | | Deployment |
|  |  |  |  |  | Plan |
|  |  |  |  |  |  |  |  |  |
|  | **Operations** |  |  |  |  |  |  |  |  |



Page 24 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Design Phase*

**Phase 4.1 – Analysis**

The purpose of the Analysis Phase is to define and document the functional requirements and begin designing the system; this includes defining the business rules for the application and reflecting those rules within the Application Design Document. The Development Working Group (DWG) works with the development team to define the development strategy and identify the standard and approved architectural components and services to be used. If the application requires a deviation from architectural standards or would benefit from additional architectural input, then the Analyst will work with the EAC to schedule a review and use existing documents such as the Application Design Document for the review. Testing and training strategy documents will be developed and the Application Deployment Plan will continue to be refined. Security will be reviewed from both an application standpoint as well as access needs for the project team.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner /** |  |  | **Links / Notes** | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  | **Participant** |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Define Business |  |  | General business rules will be gathered and defined for the system. These |  |  | - Project Proposal |  |  | - Business Rules |  |  | Analyst (Owner) |  |  | [Business Rules Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/BusinessRulesTemplate.xlsx) | | | | |
|  | Rules |  |  | rules will reflect business processes and policies that must be supported |  |  | - Project Charter |  |  | Document |  |  | Customer |  |  |  |  |  |  |  |
|  |  |  |  | through the various components of the application. Each rule has a unique |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  |  |  | identifier and will be referenced in the Application Design Documents. The |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  |  | business rules will define both the rules that are within the scope of the |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  |  |  | project and those rules that are outside of the scope of the project and |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | |
|  |  |  |  | handled elsewhere. For smaller applications, the business rules may just be |  |  |  |  |  |  |  |  |  |  |  | BusinessRulesTemplate.xlsx | | | | |
|  |  |  |  | defined within the Application Design Document. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Business Rule |  |  | A review of the business rules will be held to review the completeness and |  |  | - Business Rules |  |  | - Business Rules |  |  | Analyst (Owner) |  |  |  |  |  |  |  |
|  | Review |  |  | understanding of the business rules. The rules will be reviewed by the |  |  | Document |  |  | Document |  |  | Customer |  |  |  |  |  |  |  |
|  |  |  |  | analysts and developers to ensure their ability to translate the business rules |  |  |  |  |  |  |  |  | Development |  |  |  |  |  |  |  |
|  |  |  |  | into concise specifications. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Conduct DWG |  |  | The Development Working Group (DWG) Design Collaboration is intended to |  |  | - Application Design |  |  | - Application Design |  |  | Development (Owner) |  |  | [DWG Charter](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/DWGCharter.docx) | | | | |
|  | Design |  |  | work with developers and analysts to determine design options and guide |  |  | Document |  |  | Document |  |  | Analyst |  |  |  |  |  |  |  |
|  | Collaboration |  |  | the design of the technical solution for the project to meet system and |  |  |  |  |  |  |  |  | Development Working |  |  | Intranet: | | | | |
|  |  |  |  | architectural standards at . The DWG is comprised of senior application |  |  |  |  |  |  |  |  | Group (DWG) |  |  | Documentation Library > | | | | |
|  |  |  |  | developers, architects, EAI, ICC members, and analysts, and looks to |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  |  |  | leverage reusability of components and services. The DWG helps to control |  |  |  |  |  |  |  |  |  |  |  | Guides > DWGCharter.docx | | | | |
|  |  |  |  | the introduction of new technology and methods into the developer toolkit. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | The DWG will also work with the EAC (Enterprise Architecture Committee) to |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | put projects through the appropriate process. Members of the EAC meet |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | with analysts to determine if the projects require any monitoring or active |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | involvement by the EAC. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Develop |  |  | The documentation of functional requirements for the project is a |  |  | - Project Proposal |  |  | - Application Design |  |  | Analyst (Owner) |  |  |  |  |  |  |  |
|  | Application |  |  | collaborative effort involving analysts, developers, and key client personnel. |  |  | - Project Charter |  |  | Document |  |  | Development |  |  | [Application Design](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDesignTemplate.docx) | | |  | |
|  | Design |  |  | This document is initially built during this phase and is iteratively enhanced |  |  | - Business rules |  |  |  |  |  | Customer |  |  | [Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDesignTemplate.docx) | | | | |
|  |  |  |  | with more detailed information throughout the development life cycle. |  |  | - DWG/EAC review |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 25 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Design Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner /** |  |  | **Links / Notes** | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | **Participant** |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Functional requirements will be documented in an Application Design | |  |  | results |  |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  |  |  | Document that includes the following components: | |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  |  |  | Application Overview - A high level overview of business |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | |
|  |  |  |  | processes and business requirements. | |  |  |  |  |  |  |  |  |  |  |  | ApplicationDesignTemplate. | | | | |
|  |  |  |  |  | Application Flow Diagram - Displays impacts and actions for all |  |  |  |  |  |  |  |  |  |  |  | docx | | | | |
|  |  |  |  | processes involved in the design. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | User Access + Security - Specifies the various user groups that can |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | access the application. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Design Specifications - Detailed design for Web Applications, |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Batch Applications, and Reports. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Data Dictionary - Provides a description of the data for each input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | retrieved from a database table and output written to a database table. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Develop |  |  | If it is determined that the application requires development of new EAI | |  |  | - Application Design |  |  | - Integration |  |  | Analyst (Owner) |  |  | [Integration Overview](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/IntegrationOverviewTemplate.docx) | | |  | |
|  | Integration |  |  | integrations or new versions of existing integrations, Integration Overview | |  |  | Document |  |  | Overview Template |  |  | Development |  |  | [Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/IntegrationOverviewTemplate.docx) | | | | |
|  | Overview/ |  |  | Templates will be produced for each new integration. If the integration | |  |  |  |  |  | - Enterprise Objects |  |  |  |  |  |  |  |  |  |  |
|  | Enterprise |  |  | requires new enterprise objects to be produced, templates will be started | |  |  |  |  |  | Template |  |  |  |  |  | Intranet: | | | | |
|  | Objects (EO) |  |  | which will help identify and define the enterprise objects. | |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  | Template |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | IntegrationOverviewTempla | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | te.docx | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [EO Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/EnterpriseObjectTemplate.docx) | |  | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | EnterpriseObjectTemplate.d | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ocx | | | | |
|  | Develop |  |  | Some implementations will require the conversion of data from existing | |  |  | - Project Proposal |  |  | - Conversion Strategy |  |  | Analyst (Owner) |  |  | [Conversion Process Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/ConversionProcessGuide.docx) | | | | |
|  | Conversion |  |  | systems into the new system. During the Analysis and Design phases, the | |  |  | - Project Charter |  |  |  |  |  | Development |  |  |  |  |  |  |  |
|  | Strategy |  |  | source systems will be identified, the data selection criteria will be | |  |  | - Business rules |  |  |  |  |  | Project Manager |  |  | Intranet: | | | | |
|  |  |  |  | determined and crosswalk s and business logic will be designed. The | |  |  | - Application Design |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  |  | acceptance criteria for the conversion will also be established with the | |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | |
|  |  |  |  | customer. |  |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ConversionProcessGuide.do | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | cx | | | | |
|  | Conduct EAC |  |  | If it is determined that the EAC needs to be involved in a project, the analyst | |  |  | - Application Design |  |  | - Application Design |  |  | Analyst (Owner) |  |  |  |  |  |  |  |
|  | Review |  |  | will present the project at a regularly scheduled EAC meeting. | |  |  | Document |  |  | Document |  |  | Architecture |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Project Manager |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Development |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Security |  |  |  |  |  |  |  |
|  | Conduct Security |  |  | The storage, handling, and usage of sensitive data, such as (but not limited | |  |  | - Application Design |  |  | - Security Review |  |  | Analyst (Owner) |  |  | [Security Review Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityReviewTemplate.docx) | | | | |
|  | Review |  |  | to) Social Security Numbers, will be examined to prevent data exposure. As | |  |  | Document |  |  | Template |  |  | Project Manager |  |  |  |  |  |  |  |

Page 26 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Design Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner /** |  |  | **Links / Notes** | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  | **Participant** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | sensitive data usage is identified, appropriate departmental approvals will |  |  | - Business Rules |  |  |  |  |  | Security |  |  | Intranet: | | | | | | |
|  |  |  |  | be obtained and functionality will be added to the application to minimize |  |  |  |  |  |  |  |  | Business Owners |  |  | Documentation Library > | | | | | | |
|  |  |  |  | the data exposure. If SSN is being used, review and approval by the |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | |
|  |  |  |  | University SSN Committee is required. Data storage, handling and usage |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | |
|  |  |  |  | requirements are documented in the Security Review Template. |  |  |  |  |  |  |  |  |  |  |  | SecurityReviewTemplate.do | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | cx | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | | |  |  |
|  | Conduct Baseline |  |  | Access requirements to the different environments (databases, linux, unix, |  |  | - Application Design |  |  | - Access |  |  | Analyst (Owner) |  |  | [Access Requirements](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityAccessRequirementsTemplate.doc) | | | | | | |
|  | Access Control |  |  | etc.) should be identified early in the project. This includes new accounts |  |  | Document |  |  | Requirements |  |  | Project Manager |  |  | [Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityAccessRequirementsTemplate.doc) | | |  | | | |
|  | Review |  |  | that need to be created, how access will be granted in development, QA, |  |  |  |  |  | Template |  |  | Security |  |  |  |  |  |  |  |  |  |
|  |  |  |  | production, etc. and any access logs that are delivered or need to be |  |  |  |  |  | - Access Control |  |  |  |  |  | Intranet: | | | | | | |
|  |  |  |  | created. |  |  |  |  |  | Template |  |  |  |  |  | Documentation Library > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | |
|  |  |  |  | Controls should also be reviewed at this time, including vendor-delivered |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | |
|  |  |  |  | controls, detective and/or corrective controls. |  |  |  |  |  |  |  |  |  |  |  | SecurityAccessRequirement | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | sTemplate.doc | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Baseline Access Control](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityBaselineAccessControlReviewForApplications.docx) | | | |  | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Review Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityBaselineAccessControlReviewForApplications.docx) | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | |  | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | SecurityBaselineAccessCont | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | rolReviewForApplications.d | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ocx | | | | | | |
|  | Conduct |  |  | The Application Design and Business Rules will be examined for |  |  | - Application Design |  |  | - Revised Application |  |  | Analyst (Owner) |  |  |  |  |  |  |  |  |  |
|  | Application |  |  | completeness; adherence to scope; and that client needs have been met. |  |  | Document |  |  | Design Document |  |  | Project Manager |  |  |  |  |  |  |  |  |  |
|  | Design Review |  |  | Any deficiencies will be addressed to avoid rework later in the project. |  |  | - Business Rules |  |  |  |  |  | Development |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Customer |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | | |  | |
|  | Develop Training |  |  | The training strategy will define training objectives, roles, and |  |  | - Project Charter |  |  | - Training Strategy |  |  | Project Manager |  |  | [Training Strategy Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/TrainingStrategyTemplate.docx) | | | | | | |
|  | Strategy |  |  | responsibilities. Additionally, the type of training, schedule, references, |  |  | - Business Rules |  |  |  |  |  | (Owner) |  |  |  |  |  |  |  |  |  |
|  |  |  |  | dependencies and type of materials that will be required will be identified |  |  | - Application Design |  |  |  |  |  | Training Team |  |  | Intranet: | | | | | | |
|  |  |  |  | during this stage. This is a high level description with specific details to be |  |  | Document |  |  |  |  |  | Customer |  |  | Documentation Library > | | | | | | |
|  |  |  |  | added in a later process. |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | TrainingStrategyTemplate.d | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ocx | | | | | | |
|  | Develop Testing |  |  | The testing strategy will identify the approach, goals, timeline, participants, |  |  | - ITPC Template |  |  | - Testing Strategy |  |  | Project Manager |  |  | [Testing Strategy Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/TestingStrategyTemplate.docx) | | | | | | |
|  | Strategy |  |  | needs, and dependencies The strategy will define the overall goals and |  |  | - Application Design |  |  |  |  |  | (Owner) |  |  |  |  |  |  |  |  |  |
|  |  |  |  | execution but will leave the specific details to be defined in a later process. |  |  | Document |  |  |  |  |  | Customer |  |  | Intranet: | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Analyst |  |  | Documentation Library > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  | QA team |  |  | Methodology > SDLC > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | TestingStrategyTemplate.do | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | cx | | | | | | |

Page 27 of 67

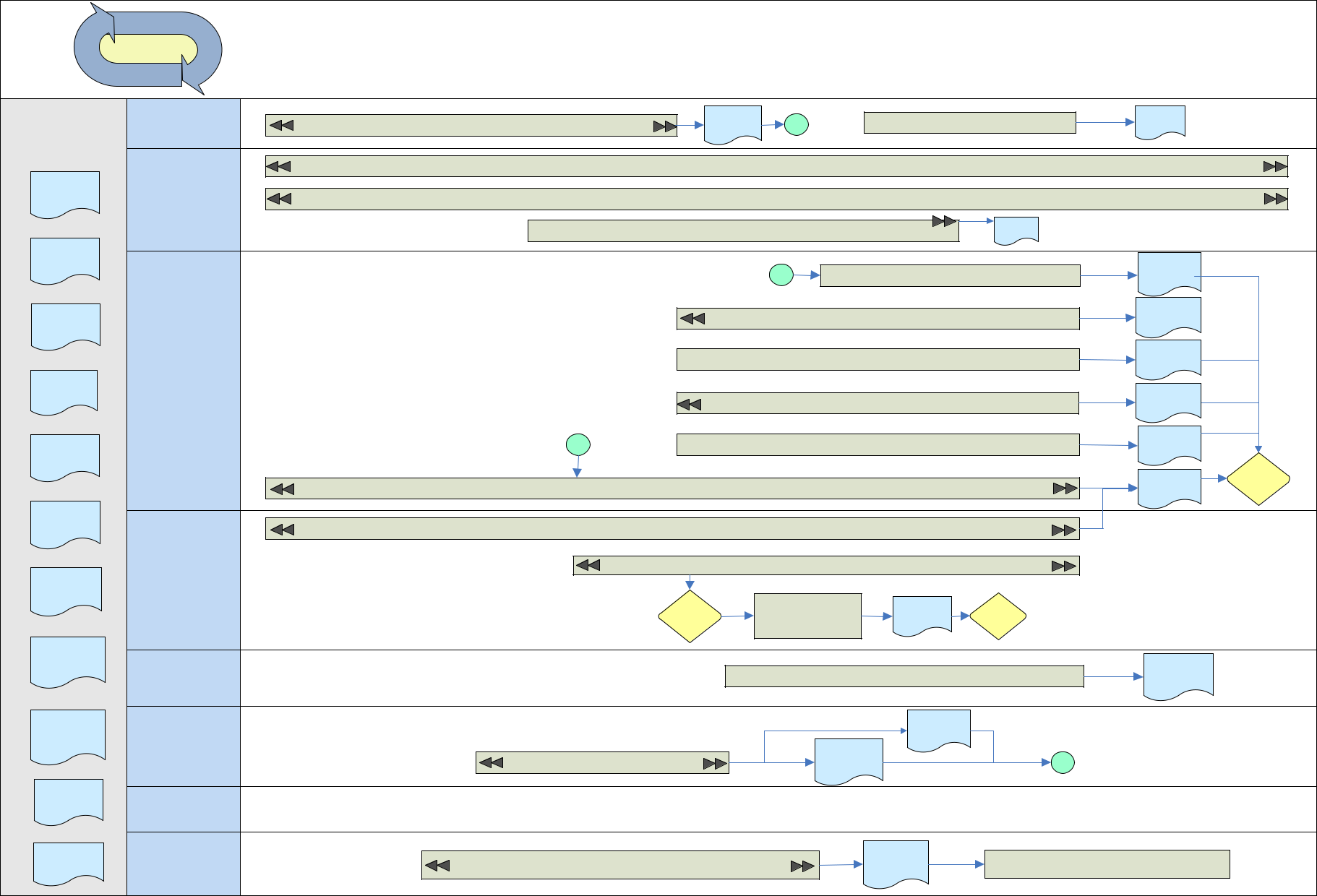
*Project Management Life Cycle: Software Development Life Cycle 2.0: Design Phase*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  |  |  | **Description** |  | **Inputs** |  | **Outputs** |  |  | **Owner /** |  |  | **Links / Notes** | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  | **Participant** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Revise |  |  | The initial Application Deployment Plan should be reviewed and updated as | | |  | - Application |  | - Application |  |  | Deployment (Owner) |  |  | [Application Deployment](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDeploymentTemplate.docx) | | | | |  | |
|  | Application |  |  | needed. The new hardware and software requirements should be reviewed | | |  | Deployment Plan |  | Deployment Plan |  |  | Development |  |  | [Plan](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDeploymentTemplate.docx) | | | | | | |
|  | Deployment Plan |  |  | and compared to the ITPC hardware/software template requirements. | | |  |  |  |  |  |  | Analyst |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Additional costs should be communicated back. | | |  |  |  |  |  |  |  |  |  | Intranet: | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | pplicationDeploymentTempl | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ate.docx | | | | | | |
|  | Communication |  |  | The various forums and communication mechanisms identified in the | | |  | -Communication |  | -Various |  |  | Project Manager |  |  | Templates for various types | | | | | | |
|  |  |  |  | communication plan continue to be performed as the project progresses. As | | |  | Plan |  | communication |  |  | (Owner) |  |  | of meetings as well as | | | | | | |
|  |  |  |  | the project moves into new phases, additional types of communication | | |  |  |  | outputs per the |  |  | Project Team |  |  | guides to using Clarity and | | | | | | |
|  |  |  |  | activities may become necessary and activities previously done may need to | | |  |  |  | Communication Plan |  |  | Portfolio Management |  |  | SharePoint can be found in | | | | | | |
|  |  |  |  | evolve or be eliminated as participants change or the project focus shifts. | | |  |  |  |  |  |  | Office |  |  | the [Sharepoint Document](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Library.](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | |  |  | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle | | | | | | |
|  |  |  |  |  | | |  |  |  |  |  |  |  |  |  |  | | | |  | | |
|  | Monitor and |  |  | Throughout the course of a project there are a number recurring activities | | |  | - Project Charter |  | -Updated project |  |  | Project Manager |  |  | The PMO Monthly Checklist | | | | | | |
|  | Control |  |  | related to keeping the project on track and making adjustments to the plan | | |  | - Communication |  | plan |  |  | (Owner) |  |  | is a good guide for | | | | | | |
|  |  |  |  | when needed. | | At a minimum, these activities include: |  | Plan |  | -Risks, issues, and |  |  | AFM |  |  | monitoring and controlling | | | | | | |
|  |  |  |  |  |  |  |  | -Project Plan |  | change requests in |  |  | Portfolio Management |  |  | a project. | | | | | | |
|  |  |  |  |  | Managing risks and issues in Clarity | |  |  |  | Clarity |  |  | Office |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Manage change requests | |  |  |  | -Action items in |  |  |  |  |  | [PMO Monthly Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/UpdatingAProject-PMOChecklist.pdf) | | | | | | |
|  |  |  |  |  | Following up on tasks and enforcing schedule | |  |  |  | SharePoint |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Managing action items in SharePoint | |  |  |  |  |  |  |  |  |  | Intranet: | | | | | | |
|  |  |  |  |  | Updating project plan in Clarity: | |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | |
|  |  |  |  |  |  | Tasks |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | | | |
|  |  |  |  |  |  | Resources |  |  |  |  |  |  |  |  |  | Management Lifecycle > | | | | | | |
|  |  |  |  |  |  | Schedule |  |  |  |  |  |  |  |  |  | Guides > UpdatingAProject- | | | | | | |
|  |  |  |  | Complex or large projects may require additional monitoring effort. The | | |  |  |  |  |  |  |  |  |  | PMOChecklist.pdf | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | PMO can help in developing reports and tools to keep your project on | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | budget and on schedule. | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 28 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Design Phase*

**Design Phase**

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|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |
|  | ***Software Development*** |  | 4.2 Design | |  |  |  |  |  |  |
|  | ***Life Cycle*** |  |  |  |  |  |  |  |
|  | **SDLC** |  |  |  |  |  |  |  |  |  |
| Phase | **Customer** | Revise Business Rules |  | Business |  | 1 | Develop Training Plan | | Training |  |
|  | Rules |  | Plan |  |
| Inputs |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Communication | | |  |  |  |  |
| Business | **Project** |  |  |  |  |  |  |  |  |  |
| Rules |  |  | Monitor and Control | | |  |  |  |  |
| **Manager** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | Manage Change Requests | | | |  | CR Log |  |  |
| Project |  |  |  |  |  |  |  |  | Sensitive |  |
| Plan |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 2 | Complete Sensitive Data Usage Form | | | Data Use |  |
|  |  |  |  |  |  |
|  |  |  |  |  | Form |  |
|  |  |  |  |  |  |  |  |  |  |
| Training |  |  |  |  |  | Revise Conversion Strategy | |  | Conversion |  |
|  |  |  |  |  |  | Strategy |  |
| Strategy |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Develop Style Guide | |  | Style Guide |  |
|  |  |  |  |  |  |  |  |  |
| Testing | **Analyst** |  |  |  |  |  |  |  | Integration/ |  |
| Strategy |  |  |  |  |  |  |  |  |  |
|  |  |  | Develop Integration / Enterprise Objects Template | | | | | EO |  |
|  |  |  |  |  |
|  |  |  |  | Templates |  |
|  |  |  |  |  |  |  |  |  |  |
| Application |  |  | 1 |  |  | Develop Service Guide | |  | Service |  |
|  |  |  |  |  | Guides |  |
| Design |  |  |  |  |  |  |  |  |  | Application |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | Revise Application Design | |  |  |  |  | Application | Design |
|  |  |  |  |  |  |  | Design | Review |
| Integration / |  |  |  |  |  |  |  |  |  |  |
| EO |  |  | Revise Application Design | |  |  |  |  |  |  |
| Templates |  |  |  |  |  |  |  |  |
| Security |  |  |  | Conduct DWG Design Collaboration | | | |  |  |  |
| **Development** |  |  |  |  |  |  |  |  |  |
| Review |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Template |  |  | EAC | Yes | Schedule EAC | | Application | EAC |  |  |
|  |  |  |  |  |
|  |  |  | Review |  |  |
|  |  |  |  |  | Review | Design | Review |  |  |
|  |  |  | Needed? |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Access |  |  |  |  |  |  |  |  |  |  |
| Requirements |  |  |  |  |  |  |  |  | QA Master |  |
| / Controls | **Quality** |  |  |  |  | Develop QA Master Test Plan | | |  |
|  |  |  |  | Test Plan |  |
|  | **Assurance** |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Application |  |  |  |  |  |  | Security |  |  |  |
|  |  |  |  |  |  | Review |  |  |  |
| Deployment |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Template |  |  |  |
| Plan | **Security** |  |  |  |  | Access |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  | Conduct Security Review | |  |  | Requirements | | 2 |  |  |
|  |  |  |  | / Controls | |  |  |
|  |  |  |  |  |  |  |  |  |
| Communic |  |  |  |  |  |  |  |  |  |  |
| -ation plan | **Deployment** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Conversion |  |  |  |  |  |  | Application |  |  |  |
| **Operations** | Revise Application Deployment Plan | | |  |  | Deployment | Order New Hardware and Software | |  |
| Strategy |  |  |  |
|  |  | Plan |  |
|  |  |  |  |  |  |  |  |  |  |

Page 29 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Design Phase*

**Phase 4.2 – Design**

The purpose of the Design Phase is to develop and document detailed technical specifications for the application. The Application Design Document developed during the Analysis phase is further refined and more detail is added to the specification. Other design specifications such as integration templates, style guides, and service guides are produced as well. A master test plan is created that outlines the types of testing that will be needed for the project. An EAC review will be held if determined necessary by the Development Working Group (DWG). A detailed training plan is developed by the customer if the need exists. New hardware and software will be ordered if required by the project.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Revise |  |  | The Application Design Document that was started during the Analysis phase |  |  | - Application Design |  |  | - Revised Application |  |  | Analyst (Owner) |  |  | [Application Design Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDesignTemplate.docx) | | | |
|  | Application |  |  | will be further refined to provide more technical details regarding the |  |  | Document |  |  | Design Document |  |  | Development |  |  |  |  |  |  |
|  | Design |  |  | application. The Design Specifications section will be augmented to include |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | |
|  | Document |  |  | detailed edits, business rules, pseudo code, screen action behaviors, |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | |
|  |  |  |  | frameworks, etc. |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ApplicationDesignTemplate.do | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | cx | | | |
|  | Revise Business |  |  | As designs become more detailed customers may update the business rules |  |  | - Business Rules |  |  | - Business Rules |  |  | Customer |  |  | [Business Rules Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/BusinessRulesTemplate.xlsx) | | | |
|  | Rules |  |  | for the system. The rules are reflected within the Application Design |  |  | Document |  |  | Document |  |  | Analyst (Owner) |  |  |  |  |  |  |
|  |  |  |  | Documents utilizing the unique identifier or for smaller applications, the |  |  | - Application Design |  |  |  |  |  |  |  |  | Intranet: | | | |
|  |  |  |  | rules may be defined directly within the Application Design Document. |  |  | Document |  |  |  |  |  |  |  |  | Documentation Library > | | | |
|  |  |  |  | Major changes or additions of business rules may result in an increased |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | |
|  |  |  |  | scope of the project. Changes to scope will be handled through the Change |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | |
|  |  |  |  | Request Management process. |  |  |  |  |  |  |  |  |  |  |  | BusinessRulesTemplate.xlsx | | | |
|  | Conduct DWG |  |  | The Development Working Group (DWG) Design Collaboration effort |  |  | - Application Design |  |  | - Application Design |  |  | Development (Owner) |  |  | [DWG Charter](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/DWGCharter.docx) | | | |
|  | Design |  |  | provides continued support from the DWG team to address design issues |  |  | Document |  |  | Document |  |  | Analyst |  |  |  |  |  |  |
|  | Collaboration |  |  | and changes in design approach. It continues to look to leverage reusability |  |  |  |  |  |  |  |  | Development Working |  |  | Intranet: | | | |
|  |  |  |  | of components and services and help control the introduction of new |  |  |  |  |  |  |  |  | Group (DWG) |  |  | Documentation Library > | | | |
|  |  |  |  | technology and methods into the developer toolkit. |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > Guides | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | > DWGCharter.docx | | | |
|  |  |  |  | The DWG also recommends proceeding with EAC Reviews when deemed |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | necessary. An EAC Review may be necessary when analysis reveals that a |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | non-standard approach may be required in the construction of the technical |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | solution for the project or the overall complexity of the application warrants |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | a review. When an EAC Review is required, the DWG works with the |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | application developer to determine the appropriate documentation for the |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | EAC Review. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Develop Style |  |  | For web applications, a Style Guide is developed which specifies the agreed |  |  | - Application Design |  |  | - Style Guide |  |  | Analyst (Owner) |  |  | [Web Application Style Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/WebApplicationStyleGuide.docx) | | | |
|  | Guide |  |  | upon ‘look and feel’ of the Web components of the system. For application |  |  | Document |  |  |  |  |  | Development |  |  |  |  |  |  |
|  |  |  |  | consistency for users, Style Guides from previous systems in that functional |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | |
|  |  |  |  | area should be used as a starting point. This will help keep application look |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | |

Page 30 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Design Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | and feel consistent for users of multiple applications. When required, a link |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |  |
|  |  |  |  | to this document is included in the ATO. |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | WebApplicationStyleGuide.doc | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | | | | |  |
|  | Revise |  |  | If it is determined that the application requires development of new EAI |  |  | - Integration |  |  | - Integration |  |  | Analyst (Owner) |  |  | [Integration Overview Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/IntegrationOverviewTemplate.docx) | | | | |  |
|  | Integration |  |  | integrations or new versions of existing integrations, Integration Templates |  |  | Overview Template |  |  | Overview Template |  |  | Development |  |  |  |  |  |  |  |  |
|  | Overview / |  |  | will be produced for each new integration. If documents were started in the |  |  | - Enterprise Objects |  |  | - Enterprise Objects |  |  |  |  |  | Intranet: | | | | |  |
|  | Enterprise |  |  | Analysis phase, then they will be revised as the Design phase progresses. |  |  | (EO) Template |  |  | (EO) Template |  |  |  |  |  | Documentation Library > | | | | |  |
|  | Objects (EO) |  |  |  |  |  | - Application Design |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |  |
|  | Templates |  |  |  |  |  | Document |  |  |  |  |  |  |  |  | Templates and Forms > | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | IntegrationOverviewTemplate. | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | docx | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [EO Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/EnterpriseObjectTemplate.docx) | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | EnterpriseObjectTemplate.doc | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | | | | |  |
|  | Revise |  |  | Some implementations will require the conversion of data from existing |  |  | - Project Proposal |  |  | - Conversion Strategy |  |  | Analyst (Owner) |  |  | [Conversion Process Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/ConversionProcessGuide.docx) | | | | |  |
|  | Conversion |  |  | systems into the new system. During the Analysis and Design phases, the |  |  | - Project Charter |  |  |  |  |  | Development |  |  |  |  |  |  |  |  |
|  | Strategy |  |  | source systems will be identified, the data selection criteria will be |  |  | - Business rules |  |  |  |  |  | Project Manager |  |  | Intranet: | | | | |  |
|  |  |  |  | determined and crosswalk s and business logic will be designed. The |  |  | - Application Design |  |  |  |  |  |  |  |  | Documentation Library > | | | | |  |
|  |  |  |  | acceptance criteria for the conversion will also be established with the |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | |  |
|  |  |  |  | customer. |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle > | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ConversionProcessGuide.docx | | | | |  |
| Develop Service | |  |  | A service is functionality developed by and provided or access granted |  |  | - Application Design |  |  | - Service |  |  | Analyst (Owner) |  |  | [Service Guide Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ServiceGuideTemplate.docx) | | | | |  |
| Guide | |  |  | to customers outside of . Examples of services would be web services, |  |  | Document |  |  | Implementation |  |  | Development |  |  |  |  |  |  |  |  |
|  |  |  |  | Java Library Files and JMS Objects. Customers of these services usually |  |  |  |  |  | Guide |  |  |  |  |  | Intranet: | | | | |  |
|  |  |  |  | have their own development staff. |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |  |
|  |  |  |  | As new services are identified during the design process, a service guide will |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | |  |
|  |  |  |  | be produced. The Service Guide is used by subscribers of the service and |  |  |  |  |  |  |  |  |  |  |  | ServiceGuideTemplate.docx | | | | |  |
|  |  |  |  | provides the necessary information for accessing and utilizing the service. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Sample Service Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Examples/SAMPLE_ServiceGuide.docx) | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | |  | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Examples> | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | SAMPLE\_ServiceGuide.docx | | | | |  |
| Conduct EAC | |  |  | An initial or follow up EAC review will be scheduled if required. Changes that |  |  | - Application Design |  |  | - Application Design |  |  | Enterprise |  |  |  |  |  |  |  |  |
| Review | |  |  | result from the meeting will be documented in the Application Design |  |  | Document |  |  | Document |  |  | Architecture |  |  |  |  |  |  |  |  |
|  |  |  |  | Document. |  |  |  |  |  |  |  |  | Committee (EAC) |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Analyst (Owner) |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Project Manager |  |  |  |  |  |  |  |  |

Page 31 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Design Phase*

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| **Activities** |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | | | | | |
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|  |  |  |  |  |  |  |  |  |  |  |  | Development |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | |  | | |  |
| Conduct Security |  |  | An initial review of security requirements may have been started in the |  |  | - Application Design |  |  |  |  |  | Security |  |  | [Security Review Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityReviewTemplate.docx) | | | | | | | |
| Review |  |  | Analysis phase. As such, the Security Review, Access Control Review, and |  |  | Document |  |  |  |  |  | Project Manager |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Baseline Access Control Review templates should be reviewed and revised if |  |  | - Business Rules |  |  |  |  |  | Analyst (Owner) |  |  | Intranet: | | | | | | | |
|  |  |  | necessary. This process will help identify the storage, handling, and usage |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | |
|  |  |  | of sensitive data, such as (but not limited to) Social Security Numbers, will be |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | |
|  |  |  | examined to prevent data exposure. The findings in this review may |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | | |
|  |  |  | facilitate design adjustments. The review will also help establish |  |  |  |  |  |  |  |  |  |  |  | SecurityReviewTemplate.docx | | | | | | | |
|  |  |  | environment access and request processes needed for project team |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | members in the Development, Test, Training, and pre-production |  |  |  |  |  |  |  |  |  |  |  | [Access Requirements](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityAccessRequirementsTemplate.doc) | | | | | | | |
|  |  |  | environments. |  |  |  |  |  |  |  |  |  |  |  | [Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityAccessRequirementsTemplate.doc) | | |  | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | | | |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | SecurityAccessRequirementsTe | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | mplate.doc | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Baseline Access Control](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityBaselineAccessControlReviewForApplications.docx) | | | | |  | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Review Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityBaselineAccessControlReviewForApplications.docx) | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | |  | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | SecurityBaselineAccessControl | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ReviewForApplications.docx | | | | | | | |
| Complete |  |  | If it has been identified that the application is using sensitive data (e.g., SSN) |  |  | - Application Design |  |  | - SSN Acceptable Use |  |  | Analyst (Owner) |  |  | [SSN Usage Guidelines](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/SSNGuidelinesForAITSDevelopedApplications.docx) | | | | | | | |
| Sensitive Data |  |  | and there are no alternatives to that data, then a SSN Acceptable Use |  |  | Document |  |  | Template |  |  | Security |  |  |  |  |  |  |  |  |  |  |
| Usage Form |  |  | template must be completed and signed by the authorized department head |  |  | - Business Rules |  |  |  |  |  | Project Manager |  |  | Intranet: | | | | | | | |
|  |  |  | from the customer’s unit. |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides> | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | SSNGuidelinesForDevelop | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | edApplications.docx | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [SSN Acceptable Use Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/AITSApplicationSSNAcceptableUseTemplate.docx) | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ApplicationSSNAcceptable | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | UseTemplate.docx | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Conduct Design |  |  | The design will be examined for adherence to existing standards and |  |  | - Application Design |  |  | - Application Design |  |  | Analyst (Owner) |  |  |  |  |  |  |  |  |  |  |
| Review |  |  | functional completeness. The review also provides the opportunity to refine |  |  | Document |  |  | Document |  |  | Customer |  |  |  |  |  |  |  |  |  |  |

Page 32 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Design Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** |  |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | the Application Design prior to the beginning of construction. Any | |  |  | - Service Guide |  |  | - Service Guide |  |  | Development |  |  |  |  |  |  |
|  |  |  | deficiencies and refinements will need to be documented and corrected | |  |  | - Integration |  |  | - Integration |  |  | Project Manager |  |  |  |  |  |  |
|  |  |  | before continuing with the product development. | |  |  | Overview Template |  |  | Overview Template |  |  | Quality Assurance |  |  |  |  |  |  |
|  |  |  |  |  |  |  | - Enterprise Objects |  |  | - Enterprise Objects |  |  | Security |  |  |  |  |  |  |
|  |  |  |  |  |  |  | (EO) Template |  |  | (EO) Template |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | - Business Rules |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | - Style Guide |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| Develop QA |  |  | The Quality assurance team will review and document with the project | |  |  | - Application Design |  |  | - QA Master Test |  |  | Quality Assurance |  |  | [QA Master Test Plan Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/QAMasterTestPlanTemplate.docx) | | | |
| Master Test Plan |  |  | manager the types of testing that QA has to offer and what will be needed | |  |  | Document |  |  | Plan |  |  | (Owner) |  |  |  |  |  |  |
|  |  |  | for the specific project. | |  |  |  |  |  |  |  |  | Project Manager |  |  | Intranet: | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | |
|  |  |  | The different types of testing are: | |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | |
|  |  |  |  | **Functional Test** - verify that the application is functioning |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | QAMasterTestPlanTemplate.d | | | |
|  |  |  | according to specifications. | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | ocx | | | |
|  |  |  |  | **Regression Test** - test changes in software to make sure other |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | areas of application haven't been impacted. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | **Performance Test**: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | **Load Testing:** Measures response times, transaction rates, and |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | other time sensitive requirements associated with the application. The goal | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | of Performance testing is to verify that the performance requirements have | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | been achieved. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | **Stress Testing:** identifies the peak load the system can handle. It |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | is intended to find errors due to low resources or competition for resources. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Low memory or disk space may reveal defects in the software that aren't | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | apparent under normal conditions. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | **Volume Testing:** subjects the software to large amounts of data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | to determine if limits are reached that cause the software to fail. Volume | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | testing also identifies the continuous maximum load or volume the system | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | can handle for a given period of time. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | **Configuration Test** - Configuration testing verifies operation of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | the software on different software and hardware configurations. This would | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | include testing of operating systems and browsers. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Develop Training |  |  | If a need for training has been identified a detailed training plan will be | |  |  | - Training Strategy |  |  | - Training Plan |  |  | Customer (Owner) |  |  |  |  |  |  |
| Plan |  |  | developed based on the functional requirements. | |  |  | - Application Design |  |  | Document |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | - Business Rules |  |  |  |  |  |  |  |  |  |  |  |  |
| Manage Change |  |  | Change requests can be generated during code design, construction and | |  |  | - Application Design |  |  | - Change Request Log |  |  | Project Manager |  |  | [Change Request Log](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SoftwareChangeRequestLog.xlsx) | | | |
| Requests |  |  | various testing processes. Change requests are defined as features or | |  |  | Document |  |  |  |  |  | (Owner) |  |  |  |  |  |  |
|  |  |  | functions that the customer would like to have included in the system but | |  |  |  |  |  |  |  |  | Analyst |  |  | Intranet: | | | |
|  |  |  | were not included in the specifications in the Application Design Document. | |  |  |  |  |  |  |  |  | Customer |  |  | Documentation Library > | | | |
|  |  |  | Change requests are managed by a process that includes prioritizing the | |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | |
|  |  |  | request, estimating the amount of work required to include the request in | |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | |
|  |  |  | the system, and setting expectations regarding when the change request | |  |  |  |  |  |  |  |  |  |  |  | SoftwareChangeRequestLog.xl | | | |
|  |  |  | work will be scheduled. Change requests require the re-initiation of the unit | |  |  |  |  |  |  |  |  |  |  |  | sx | | | |
|  |  |  | testing, deployment, and detailed testing cycle. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Change Request Form](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SoftwareChangeRequestTemplate.xlsx) | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 33 of 67

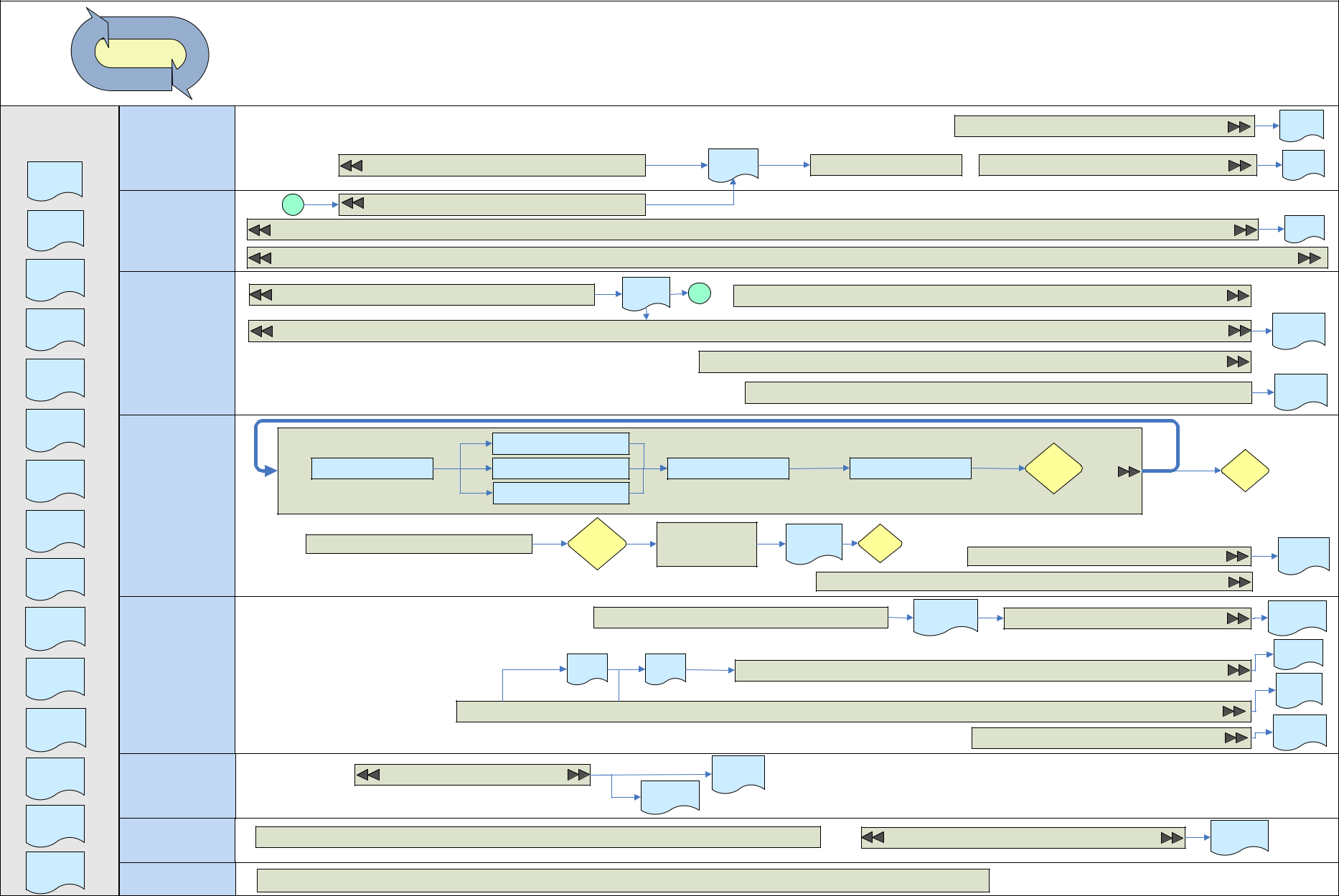
*Project Management Life Cycle: Software Development Life Cycle 2.0: Design Phase*

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| **Activities** |  |  |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | | | |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | SoftwareChangeRequestTempl | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ate.xlsx | | | | | |
| Revise |  |  | The Application Deployment Plan should be reviewed and updated as | | |  |  | - Application |  |  | - Application |  |  | Deployment (Owner) |  |  | [Application Deployment Plan](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDeploymentTemplate.docx) | | | | | |
| Application |  |  | needed. |  |  |  |  | Deployment Plan |  |  | Deployment Plan |  |  | Development |  |  |  |  |  |  |  |  |
| Deployment Plan |  |  |  |  |  |  |  |  |  |  |  |  |  | Analyst |  |  | Intranet: | | | | | |
|  |  |  | At this stage the new components section should be fully documented, the | | |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  | new infrastructure components identified and the logistics/delivery plans | | |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  | completed. Also all new hardware should be ordered at this point. | | |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | pplicationDeploymentTemplat | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | e.docx | | | | | |
| Order Hardware |  |  | The project manager will work with operations to ensure that the hardware | | |  |  | - Application |  |  | - Hardware / |  |  | Operations (Owner) |  |  |  |  |  |  |  |  |
| / Software |  |  | and software required for development of the product are ordered. | | |  |  | Deployment Plan |  |  | Software Order |  |  | Project Manager |  |  |  |  |  |  |  |  |
|  |  |  |  | | |  |  |  |  |  |  |  |  |  |  |  |  | | |  | | |
| Communication |  |  | The various forums and communication mechanisms identified in the | | |  |  | -Communication Plan |  |  | -Various |  |  | Project Manager |  |  | Templates for various types of | | | | | |
|  |  |  | communication plan continue to be performed as the project progresses. As | | |  |  |  |  |  | communication |  |  | (Owner) |  |  | meetings as well as guides to | | | | | |
|  |  |  | the project moves into new phases, additional types of communication | | |  |  |  |  |  | outputs per the |  |  | Project Team |  |  | using Clarity and SharePoint | | | | | |
|  |  |  | activities may become necessary and activities previously done may need to | | |  |  |  |  |  | Communication Plan |  |  | Portfolio Management |  |  | can be found in the [Sharepoint](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | | | | | |
|  |  |  | evolve or be eliminated as participants change or the project focus shifts. | | |  |  |  |  |  |  |  |  | Office |  |  | [Document Library.](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | |  | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: |  | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle | | | | | |
| Monitor and |  |  | Throughout the course of a project there are a number recurring activities | | |  |  | - Project Charter |  |  | -Updated project |  |  | Project Manager |  |  | The PMO Monthly Checklist is | | | | | |
| Control |  |  | related to keeping the project on track and making adjustments to the plan | | |  |  | - Communication |  |  | plan |  |  | (Owner) |  |  | a good guide for monitoring | | | | | |
|  |  |  | when needed. | | At a minimum, these activities include: |  |  | Plan |  |  | -Risks, issues, and |  |  | AFM |  |  | and controlling a project. | | | | | |
|  |  |  |  |  |  |  |  | -Project Plan |  |  | change requests in |  |  | Portfolio Management |  |  |  |  |  |  |  |  |
|  |  |  |  | Managing risks and issues in Clarity | |  |  |  |  |  | Clarity |  |  | Office |  |  | [PMO Monthly Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/UpdatingAProject-PMOChecklist.pdf) | | | | | |
|  |  |  |  | Manage change requests | |  |  |  |  |  | -Action items in |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Following up on tasks and enforcing schedule | |  |  |  |  |  | SharePoint |  |  |  |  |  | Intranet: | | | | | |
|  |  |  |  | Managing action items in SharePoint | |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  | Updating project plan in Clarity: | |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | | |
|  |  |  |  |  | Tasks |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle > | | | | | |
|  |  |  |  |  | Resources |  |  |  |  |  |  |  |  |  |  |  | Guides > UpdatingAProject- | | | | | |
|  |  |  |  |  | Schedule |  |  |  |  |  |  |  |  |  |  |  | PMOChecklist.pdf | | | | | |
|  |  |  | Complex or large projects may require additional monitoring effort. The | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | PMO can help in developing reports and tools to keep your project on | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | budget and on schedule. | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 34 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Construction Phase*

**Construction Phase**

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|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ***Software Development*** |  |  | 4.3 Construction | | | |  |  |  |  |  |
|  | ***Life Cycle*** |  |  |  |  |  |  |  |
|  | **SDLC** |  |  |  |  |  |  |  |  |  |  |  |
| Phase |  |  |  |  |  |  |  |  |  | Develop Training Materials |  | Training |
|  |  |  |  |  |  |  |  |  |  | Materials |
| Inputs | **Customer** | Develop Customer Test Plan | |  |  |  | Customer | Perform Alpha Testing | | Develop User Guides / Help Materials | | User |
| Business |  |  |  |  | Test Plan | Guides |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Rules |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1 | Develop Customer Test Plan | |  |  |  |  |  |  |  |  |  |
| Training | **Project Manager** |  |  |  |  | Manage Change Requests | | |  |  |  | CR Log |
| Plan |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Monitor, Control, and Communicate | | |  |  |  |
| Project |  |  |  |  |  |  |  |  |  |  |  |  |
| Plan |  |  |  |  | Business |  | 1 |  |  |  |  |  |
|  |  | Revise Business Rules |  |  |  |  | Manage Defects | |  |  |
|  |  |  |  | Rules |  |  |  |  |
| CR Log |  |  |  |  |  | Revise Application Design | | |  |  |  | Application |
|  |  |  |  |  |  |  |  | Design |
|  | **Analyst** |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Communic- |  |  |  |  |  |  |  |  | Perform Functional Testing | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| ation plan |  |  |  |  |  |  |  |  | Develop System Test Plan | |  | System |
|  |  |  |  |  |  |  |  |  |  | Test Plan |
| Style Guide |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Code Application | |  |  | Develop Application | |  |  |  |  |
| Integration / |  | Develop HTML | Code Bug Fixes | |  | Perform Unit Tests | |  | Deploy | User |  | Code |
|  |  |  | Show & |  |
| EO |  |  |  |  |  |  |  |  |  | Tell |  | Review |
| Templates |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Code Change Requests | |  |  |  |  |  |  |  |  |
|  | **Development** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Service |  |  |  |  |  |  |  |  |  |  |  |  |
| Guides |  | Conduct DWG Design Collaboration | | EAC | Schedule EAC | | | Application | EAC |  |  | Application |
|  |  | Review |  |  | Review | Design | Review |  |  |
|  |  |  |  | Needed? |  |  |  | Create Application Technical Overview | | Technical |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | Overview |
| Application |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Design |  |  |  |  |  |  |  |  | Database Performance Review | |  |  |
| QA Master |  |  |  |  | Develop Performance Test Plan | | | | Performance | Execute Performance Test |  | Performance |
|  |  |  |  | Test Plan |  | Test Results |
| Test Plan |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Defect |
| Sensitive |  |  |  | Test | Test | |  |  |  |  |  | Report |
| **Quality** |  |  |  |  | Execute Functional Test Cases | |  |  |
|  | Cases | | Scripts | |  |  |  |  |
| Data Use |  |  |  |  | Revised |
| **Assurance** |  |  |  |  |  |  |  |  |  |  |
| Form |  |  |  |  |  |  |  |  |  |  | Test |
|  |  |  |  |  |  |  |  |  |  |  |  | Cases |
| Security |  |  |  |  |  |  | Build Functional Test Cases and Automated Test Scripts | | | |  | Application |
| Review |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | Vulnerability |
| Template |  |  |  |  |  |  |  |  |  | Perform Application Security Scans |  |
|  |  |  |  |  |  |  |  |  |  | Reports |
| Access |  |  |  |  |  |  | Security |  |  |  |  |  |
|  | Conduct Security Review | |  |  |  | Review |  |  |  |  |  |
| Requirements |  |  |  |  |  |  |  |  |  |
| **Security** |  |  |  | Template |  |  |  |  |  |
| / Controls |  |  |  | Access | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Requirements | | |  |  |  |  |  |
|  |  |  |  |  | / Controls | | |  |  |  |  |  |
| Application |  |  |  |  |  |  |  |  |  |  |  |  |
| Deployment |  |  |  |  |  |  |  |  |  |  | Application | |
| Plan |  |  |  |  |  |  |  |  |  |  |
| **Deployment** | Configure / Deploy Infrastructure Components | | | |  |  |  | Revise Application Deployment Plan | | Deployment | |
|  |  |  |  |
|  |  |  |  |  | Plan |
| Conversion |  |  |  |  |  |  |  |  |  |  |  |  |
| Strategy | **Operations** |  | Install / Configure Hardware and Software | | | | |  |  |  |  |  |
|  |  |  |  |  |  |  |

Page 35 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Construction Phase*

**Phase 4.3 – Construction**

The purpose of the Construction Phase is to build the application program code as specified in the Application Design Document. The construction of the application is done in an iterative fashion with involvement from the customers and analysts who review the application as it is being built and identify issues, gaps, and incomplete business rules through demonstration and actual use of the application. The demonstration of the application with the customers occurs through Show and Tell sessions where developers exhibit the application functionality to the customers. Testing preparation and execution also gets underway as functional test cases, customer test plans, and performance test plans are built and executed during this phase. The testing is performed through functional testing by Quality Assurance and the analysts and then by the customers in Alpha testing. Performance testing and Security Scans are done to initially identify any major issues that need to be addressed quickly in order to minimize potential impacts to the application. In preparation for future phases, the Application Deployment Plan is revised, and the customers begin to develop training materials, user guides, and help materials. An Application Technical Overview (ATO) document is produced that serves to describe the components of the application and link the various design documents and service guides together. The ATO will become a key document used in support of the application in the future. An EAC review will be held if determined necessary by the Development Working Group (DWG) or if it has been previously decided that the application should have periodic EAC touch points.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | |
| Install / Configure |  | Hardware and software needed to support the project will be installed at | |  |  | - Hardware / |  |  |  |  |  | Operations (Owner) |  |  |  |  |  |
| Hardware and |  | this time. This may include hardware for development, test, and production. | |  |  | Software Order |  |  |  |  |  |  |  |  |  |  |  |
| Software |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Configure and |  | Infrastructure components will be built to support the application in the | |  |  | - Application |  |  |  |  |  | Deployment (Owner) |  |  |  |  |  |
| Deploy |  | operational environment. The various components could include: LDAP, | |  |  | Deployment Plan |  |  |  |  |  | Operations |  |  |  |  |  |
| Infrastructure |  | queries, topics, connections, router, proxy, and Tomcat. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Components |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Develop |  | The Development and Unit Test Cycle includes several work components | |  |  | - Application Design |  |  | - Program Code |  |  | Development (Owner) |  |  | [Application Development](https://intranet.uillinois.edu/departments/aits/Depts/ADS/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2fdepartments%2faits%2fDepts%2fADS%2fShared%20Documents%2fDevelopment%20Standards&/) | |  |
| Application |  | and, as the name implies, is cyclical in nature. | |  |  | Document |  |  | - AppWorx Chains |  |  | Analyst |  |  | [standards](https://intranet.uillinois.edu/departments/aits/Depts/ADS/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2fdepartments%2faits%2fDepts%2fADS%2fShared%20Documents%2fDevelopment%20Standards&/) | | |
|  |  |  | Develop HTML – HTML code is written using the screen mock-ups |  |  | - Application |  |  | - Code Review |  |  | Customer |  |  |  |  |  |
|  |  | or wireframes as a guide. | |  |  | Technical Overview |  |  | Documents |  |  |  |  |  |  |  |  |
|  |  |  | Code Application - Application program code is written by the |  |  | - Style Guides |  |  | - Unit Test Results |  |  |  |  |  | Intranet: | | |
|  |  | development team in accordance with the Application Design Document and | |  |  | - Service Guides |  |  |  |  |  |  |  |  | Departments > ADSD - | | |
|  |  | ADSD coding standards. | |  |  |  |  |  |  |  |  |  |  |  | Application Development and | | |
|  |  |  | Code Bug Fixes – During the code construction and various |  |  |  |  |  |  |  |  |  |  |  | Support > Shared Documents | | |
|  |  | testing processes, bugs in the application program code may be reported. | |  |  |  |  |  |  |  |  |  |  |  | > Development Standards | | |
|  |  | Bugs are defined as functions within the application program code that do | |  |  |  |  |  |  |  |  |  |  |  | Documentation > | | |
|  |  | not match the specifications in the Application Design Document. These | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | bugs must be fixed within the application program code as part of the | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | project and within the project timeline. Bug fixes require the re-initiation of | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | the unit testing, deployment, and detailed testing cycle. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 36 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Construction Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | | |
|  |  |  |  |  | Code Change Requests – As change requests are identified the |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | change is scoped which includes reviewing project timelines, budgets, or | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | staffing levels that may need to be revised in order to accommodate the | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | change. Once approved, the change request is added to the designs and test | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | plans and is coded within the application. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Perform Unit Tests – Individual Application program code |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | components or programs are tested by the development team. As | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | components are successfully tested, related components are tested together | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | prior to QA testing, system testing, or customer testing. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Deploy – As unit testing progresses, the application is deployed to |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | a test or QA environment where in-depth QA or system testing can occur. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Customer Show and Tell – This is an opportunity to show clients |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | the progress being made in the construction of the program code. Feedback | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | from customers during the early stages of the code construction process is | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | critical to creating a system that the customers will be happy with at the | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | conclusion of the project. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Revise Business |  |  | As development and testing get underway, it may be determined that | |  |  | - Business Rules |  |  | - Business Rules |  |  | Customer |  |  | [Business Rules Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/BusinessRulesTemplate.xlsx) | | | | |
|  | Rules |  |  | business rules are missing or incorrect. The rules are maintained within the | |  |  | Document |  |  | Document |  |  | Analyst (Owner) |  |  |  |  |  |  |  |
|  |  |  |  | Business Rules Document and are reflected within the Application Design | |  |  | - Application Design |  |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  |  |  | Documents. As rules are changed, added, or removed, the impact is | |  |  | Document |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  |  | assessed and managed through the Change Request Management process. | |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | BusinessRulesTemplate.xlsx | | | | |
|  | Revise Application |  |  | The Application Design Document that was started during the Analysis phase | |  |  | - Application Design |  |  | - Revised Application |  |  | Analyst (Owner) |  |  | [Application Design Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDesignTemplate.docx) | | | | |
|  | Design Document |  |  | will be updated throughout the development process. As changes or | |  |  | Document |  |  | Design Document |  |  | Development |  |  |  |  |  |  |  |
|  |  |  |  | clarifications are made, the document is updated and republished. Any | |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  |  |  | change that impacts the scope of the project must be sent through the | |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  |  | Change Request Management process. This document will be used as the | |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  |  |  | standard for determining defects within the Quality Assurance activities. | |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ApplicationDesignTemplate.d | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ocx | | | | |
|  | Conduct DWG |  |  | The Development Working Group (DWG) Design Collaboration effort | |  |  | - Application Design |  |  | - Application Design |  |  | Development (Owner) |  |  | [DWG Charter](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/DWGCharter.docx) | | | | |
|  | Design |  |  | provides continued support from the DWG team to address design issues | |  |  | Document |  |  | Document |  |  | Analyst |  |  |  |  |  |  |  |
|  | Collaboration |  |  | and changes in design approach. It continues to look to leverage reusability | |  |  |  |  |  |  |  |  | Development Working |  |  | Intranet: | | | | |
|  |  |  |  | of components and services and help control the introduction of new | |  |  |  |  |  |  |  |  | Group (DWG) |  |  | Documentation Library > | | | | |
|  |  |  |  | technology and methods into the developer toolkit. | |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides > DWGCharter.docx | | | | |
|  |  |  |  | The DWG also recommends proceeding with EAC Reviews when deemed | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | necessary. An EAC Review may be necessary when analysis reveals that a | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | non-standard approach may be required in the construction of the technical | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | solution for the project or the overall complexity of the application warrants | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | a review. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Conduct EAC |  |  | An initial or follow up EAC review will be scheduled if required. Changes that | |  |  | - Application Design |  |  | - Application Design |  |  | Enterprise Architecture |  |  |  |  |  |  |  |
|  | Review |  |  | result from the meeting will be documented in the Application Design | |  |  | Document |  |  | Document |  |  | Committee (EAC) |  |  |  |  |  |  |  |
|  |  |  |  | Document. |  |  |  |  |  |  |  |  |  | Analyst (Owner) |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Project Manager |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Development |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Security |  |  |  |  |  |  |  |
|  | Conduct Security |  |  | Security reviews began in the Analysis phase and has continued through | |  |  | - Application Design |  |  |  |  |  | Security |  |  | [Security Review Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityReviewTemplate.docx) | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 37 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Construction Phase*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | | | | | |
|  | Review |  |  | Design and into Construction. The review continues to review the handling | |  |  | Document |  |  |  |  |  | Project Manager |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | and management of sensitive data, access and authorizations built into the | |  |  | - Business Rules |  |  |  |  |  | Analyst (Owner) |  |  | Intranet: | | | | | | | |
|  |  |  |  | system and during construction will review any vulnerabilities that are | |  |  | - Application |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | |
|  |  |  |  | identified and can’t be resolved. The findings in this review may facilitate | |  |  | Vulnerability Reports |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | |
|  |  |  |  | design adjustments. | |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | SecurityReviewTemplate.doc | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Access Requirements](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityAccessRequirementsTemplate.doc) | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityAccessRequirementsTemplate.doc) |  | | | |  | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | SecurityAccessRequirements | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Template.doc | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Baseline Access Control](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityBaselineAccessControlReviewForApplications.docx) | | | | | |  | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Review Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityBaselineAccessControlReviewForApplications.docx) | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | |  | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | SecurityBaselineAccessContr | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | olReviewForApplications.doc | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | | | | | | | |
|  | Perform Code |  |  | The purpose of code reviews is to ensure that the code written by | |  |  | - Program Code |  |  | - Add code review |  |  | Development (Owner) |  |  | [Application Walkthrough](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/AITSDevelopmentWalkThroughGuidelines.rtf) | | | | | | | |
|  | Review |  |  | application development is of high quality and that it adheres to ADSD | |  |  | - AppWorx Chains |  |  | notes to Application |  |  | Analyst |  |  | [Guidelines](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/AITSDevelopmentWalkThroughGuidelines.rtf) | | | | | | |  |
|  |  |  |  | coding standards. Code reviews are usually held near the end of unit | |  |  | - Unit Test Results |  |  | Design Document |  |  | Security |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | testing, but they may be held at any stage of the code construction process, | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | depending on the complexity of the code. Code review notes contain | |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | | | |
|  |  |  |  | information about what was found during the code review, what code needs | |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | |
|  |  |  |  | to be fixed, and confirmation that the coding changes were completed. | |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | DevelopmentWalkThrou | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ghGuidelines.rtf | | | | | | | |
|  | Develop |  |  | The Application Technical Overview will provide a link to the Application | |  |  | - Application Design |  |  | - Application |  |  | Development (Owner) |  |  | [Application Technical](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationTechnicalOverviewTemplate.docx) | | | | | | | |
|  | Application |  |  | Design Document and other technical design documents that are needed to | |  |  | Document |  |  | Technical Overview |  |  | Analyst |  |  | [Overview Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationTechnicalOverviewTemplate.docx) | | | | |  | | |
|  | Technical |  |  | develop the application. | |  |  | - Style Guides |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Overview |  |  |  |  |  |  | - Service Guides |  |  |  |  |  |  |  |  | Intranet: | | | | | | | |
|  |  |  |  | Application Design Document – A product of the Analysis Phase, the |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | |
|  |  |  |  | Application Design Document includes an overview of the application, a | |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | |
|  |  |  |  | high-level project timeline, an application flow diagram, user | |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | | |
|  |  |  |  | access/security, design specifications, a data dictionary, and other | |  |  |  |  |  |  |  |  |  |  |  | ApplicationTechnicalOvervie | | | | | | | |
|  |  |  |  | information critical to the proper understanding of the application that is to | |  |  |  |  |  |  |  |  |  |  |  | wTemplate.docx | | | | | | | |
|  |  |  |  | be built. A link to this document is included in the ATO. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | System Requirements – This section of the ATO includes information |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 38 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Construction Phase*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | |
|  |  |  |  | about the internal architecture of the application, as well as the required | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | versions of Java, Tomcat, AppWorx, and Oracle. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Reusable Components – This section of the ATO identifies components |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | that can be reused in this application or that can be added to the internal | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | framework so that the component can be reused across applications. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Data Model + Schemas – This section of the ATO identifies the location |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | of the Data Model and specifies the database and schemas. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Screen Mock-Ups – This section of the ATO includes a link to the screen |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | mock-ups or wireframes for the Web components of the system. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Reports – This section of the ATO includes a list of the reports, with a |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | brief description, required for the system. When required, a link to the | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | report specifications document is included. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Accessibility Review Document – The Accessibility Review Document is |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | the summation of the customer accessibility requirements for the Web | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | components of the system. When required, a link to this document is | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | included in the ATO. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Integration Template – The Integration Template is a required |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | deliverable from integration analysis. When required, a link to this | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | document is included in the ATO. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Service Guide - When required, a link to this document is included in |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | the ATO. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Sensitive Data Usage Form – The Sensitive Data Usage Form identifies |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | sensitive data that must be used within the system and specifies the reasons | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | why the sensitive data must be used. When required, a link to this | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | document is included in the ATO. | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  | | | |
|  | Build QA |  |  | The Testing Team will develop detailed test cases that will identify the | |  |  | - Application Design |  |  | - Test Cases |  |  | Quality Assurance |  |  | [QA Mater Test Plan Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/QAMasterTestPlanTemplate.docx) | | | |
|  | Functional Test |  |  | business rules and functionality of the application that should be tested. | |  |  | Document |  |  | - Automated Test |  |  | (Owner) |  |  |  |  |  |  |
|  | Cases and |  |  | These test cases should be reviewed by the Analyst assigned. | |  |  | - Business Rules |  |  | Scripts |  |  | Analyst |  |  | Intranet: | | | |
|  | Automated Test |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | |
|  | Scripts |  |  | Automated test scripts can be developed when the development of the | |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | |
|  |  |  |  | application is almost complete. These test scripts will be utilized in the | |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | |
|  |  |  |  | future for regression testing. | |  |  |  |  |  |  |  |  |  |  |  | QAMasterTestPlanTemplate. | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | docx | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [QA Test Management Tool](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_TestersGuide.docx) | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Testers Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_TestersGuide.docx) |  |  | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | QA\_TestManagementTool\_T | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | estersGuide.docx | | | |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  | | | |
|  | Execute |  |  | The Testing Team will execute the tests that were developed to test the | |  |  | - Test Cases |  |  | - Revised Test Cases |  |  | Quality Assurance |  |  | [QA Test Management Tool](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_TestersGuide.docx) | | | |
|  | Functional Test |  |  | business rules and functionality of the application. The test results will be | |  |  | - Test Scripts |  |  |  |  |  | (Owner) |  |  | [Testers Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_TestersGuide.docx) | |  | |
|  | Cases |  |  | documented and defects will be filed. | |  |  |  |  |  |  |  |  | Analyst |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Development |  |  | Intranet: | | | |

Page 39 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Construction Phase*

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|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Customer |  |  | Documentation Library > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | QA\_TestManagementTool\_T | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | estersGuide.docx | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |
|  | Develop System |  |  | A system test plan will identify the high level activities necessary to |  |  | - Application Design |  |  | - System Test Plan |  |  | Analyst (Owner) |  |  | [Guide for System Test Plans](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/SystemTestingOutline.docx) | | | |
|  | Test Plan |  |  | complete an overall end-to-end test of the system. Factors such as database |  |  | Document |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | prep, set-up configuration, development timelines, processing requirements |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | |
|  |  |  |  | and the timing of Dress Rehearsals need to be taken into consideration as |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | |
|  |  |  |  | the plan is developed. Additional, detailed scenarios may need to be |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | |
|  |  |  |  | created, in addition to the overall test plan. |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | SystemTestingOutline.docx | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | |  |
|  | Perform |  |  | As software completes unit testing, it is turned over to the analysts to |  |  | - Business Rules |  |  |  |  |  | Analyst (Owner) |  |  | [Functional Test Plan](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/Functional_Test_Plan_Template.xlsx) | | | |
|  | Functional Testing |  |  | perform Functional Testing of the application. The testing is performed to |  |  | - Application Design |  |  |  |  |  | Development |  |  |  |  |  |  |
|  |  |  |  | measure compliance to specifications and business rules as well as |  |  | Document |  |  |  |  |  |  |  |  | Intranet: | | | |
|  |  |  |  | adherence to specifications. As issues are identified, they are |  |  | - System Test Plan |  |  |  |  |  |  |  |  | Documentation Library > | | | |
|  |  |  |  | communicated back to the developer and tracked in the Defect and Change |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | |
|  |  |  |  | Request Management systems. This round of Functional Testing is done in |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | |
|  |  |  |  | preparation of hand-off to the customers for testing. |  |  |  |  |  |  |  |  |  |  |  | Functional\_Test\_Plan\_Templ | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ate.xlsx | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | |
|  | Develop |  |  | If performance testing is required for a project, the following needs to be |  |  | - Requirements for |  |  | - Performance Test |  |  | Quality Assurance |  |  | [Performance Test Questions](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/QAPerformanceTestQuestions.docx) | | | |
|  | Performance Test |  |  | identified and documented: |  |  | Performance Test |  |  | Plan |  |  | (Owner) |  |  |  |  |  |  |
|  | Plan |  |  | o Purpose of the performance test |  |  |  |  |  | - Performance Test |  |  | Project Manager |  |  | Intranet: | | | |
|  |  |  |  | o URL of the application to test |  |  |  |  |  | Scripts (automated) |  |  | Analyst |  |  | Documentation Library > | | | |
|  |  |  |  | o Exact steps that a user of the application would do in production do |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | |
|  |  |  |  | o Database that will be used for the test and what type of access QA will |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | |
|  |  |  |  | need |  |  |  |  |  |  |  |  |  |  |  | QAPerformanceTestQuestion | | | |
|  |  |  |  | o Number of concurrent users |  |  |  |  |  |  |  |  |  |  |  | s.docx | | | |
|  |  |  |  | o Number of user Login IDs needed for test |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | o Determine how test environment hardware compares to production |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | o Determine Acceptance Criteria |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | QA will develop automated performance test scripts based on the |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | requirements specified in the performance test plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Execute |  |  | Performance testing is done to ensure that the application performs under |  |  | - Performance Test |  |  | - Performance Test |  |  | Quality Assurance |  |  |  |  |  |  |
|  | Performance Test |  |  | peak volume times as periods of high load. The testing can be broken down |  |  | Plan |  |  | Results |  |  | (Owner) |  |  |  |  |  |  |
|  |  |  |  | into these components: |  |  | - Performance Test |  |  |  |  |  | Operations |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Scripts (automated) |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Load Testing: Measures response times, transaction rates, and other time |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | sensitive requirements associated with the application. The goal of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Performance testing is to verify that the performance requirements have |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | been achieved. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Stress Testing: is intended to find errors due to low resources or competition |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | for resources. Low memory or disk space may reveal defects in the software |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | that aren't apparent under normal conditions. Other defects might results |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 40 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Construction Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | | |
|  |  |  |  | from competition for shared resource like database locks or network |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | bandwidth. Stress testing identifies the peak load the system can handle. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Volume Testing: subjects the software to large amounts of data to |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | determine if limits are reached that cause the software to fail. Volume |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | testing also identifies the continuous maximum load or volume the system |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | can handle for a given period of time. For example, if the software were |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | processing a set of database records to generate a report, a Volume Test |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | would use a large test database and check that the software behaved |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | normally and produced the correct report. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Database |  |  | During the process of testing, DBAs should enable monitors and perform |  |  | Execution of test |  |  | Performance |  |  | Development (Owner) |  |  |  |  |  |  |  |
|  | Performance |  |  | traces to look for any SQL statements which are poor performing and could |  |  | plans |  |  | Problem |  |  | Quality Assurance |  |  |  |  |  |  |  |
|  | Review |  |  | cause performance issues for the application or compromise the database. |  |  |  |  |  | Notifications |  |  | Analyst |  |  |  |  |  |  |  |
|  |  |  |  | The DBA’s generate and review reports of the most resource intensive |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | statements and notify developers of potential problems and possible tuning |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | options. The analyst, lead QA tester, or lead developers should notify the |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | DBA team when heavy testing will commence so that the monitoring can be |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | put in place. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Perform |  |  | Security testing is performed utilizing the AppScan software tool to check for |  |  | - Application |  |  | - Application |  |  | Quality Assurance |  |  | [Security Scanning Procedure](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/Vulnerability%20Scans/WebAppSecurityScanningProcess.docx) | | | | |
|  | Application |  |  | system vulnerabilities exposed by web applications. The Development team |  |  | Technical Overview |  |  | Vulnerability Reports |  |  | (Owner) |  |  |  |  |  |  |  |
|  | Security Scans |  |  | will analyze the application vulnerabilities and Operations will analyze the |  |  |  |  |  |  |  |  | Security |  |  | Intranet: | | | | |
|  |  |  |  | infrastructure vulnerabilities. All High and Medium vulnerabilities should be |  |  |  |  |  |  |  |  | Development |  |  | Documentation Library > | | | | |
|  |  |  |  | resolved prior to implementation into production. The security group will |  |  |  |  |  |  |  |  | Operations |  |  | Methodology > SDLC > | | | | |
|  |  |  |  | review the impact and risk of any medium or high vulnerabilities that cannot |  |  |  |  |  |  |  |  |  |  |  | Guides> Vulnerability Scans > | | | | |
|  |  |  |  | be resolved prior to implementation in production. |  |  |  |  |  |  |  |  |  |  |  | WebAppSecurityScanningPro | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | cess.docx | | | | |
|  |  |  |  | For any scans conducted on vended or partner systems, there are |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | considerations that must be taken as to the impact and damage that could |  |  |  |  |  |  |  |  |  |  |  | [AppScan Testers Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/Vulnerability%20Scans/AppScan_TestersGuide.docx) | | | | |
|  |  |  |  | be the result of the scan. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides> Vulnerability Scans > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | AppScan\_TestersGuide.docx | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Customer Requirements and](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/Vulnerability%20Scans/AppScanTestingConsiderationsAndRequirements.docx) | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Considerations](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/Vulnerability%20Scans/AppScanTestingConsiderationsAndRequirements.docx) |  | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides> Vulnerability Scans > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | AppScanTestingConsideration | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | sAndRequirements.docx | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | | |
|  | Develop Customer |  |  | The customer will create a detailed test plan that will be used during testing |  |  | - Application Design |  |  | - Customer Test Plan |  |  | Customer |  |  | [Customer Test Plan](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/Customer_Test_Plan_Template.xls) | | | | |
|  | Test Plan |  |  | of the application. An essential element of the customer test plan is the |  |  | Document |  |  |  |  |  | Project Manager (Owner) |  |  |  |  |  |  |  |
|  |  |  |  | establishment of software acceptance criteria. |  |  |  |  |  |  |  |  | Analyst |  |  | Intranet: | | | | |

Page 41 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Construction Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Customer\_Test\_Plan\_Templa | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | te.xls | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | | |  |
|  | Manage Defects |  |  | As defects are identified through testing, the defects are entered into a |  |  | - Application Design |  |  | - Defect Report |  |  | Analyst (Owner) |  |  | [QA Test Management Tool](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_UsersGuide.docx) | | | | | |
|  |  |  |  | tracking system where the steps to produce the defect are documented. |  |  | Document |  |  |  |  |  | Quality Assurance |  |  | [Users Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_UsersGuide.docx) | | | |  | |
|  |  |  |  | Each defect is uniquely identified and assigned a priority and a status. As |  |  |  |  |  |  |  |  | Project Manager |  |  |  |  |  |  |  |  |
|  |  |  |  | Developers correct a defect, the defect is retested and the status is |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | |
|  |  |  |  | appropriately updated based upon the results. |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  | Quality Assurance utilizes a formal defect management tools that is shared |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  | with analysts and developers. For projects which do not go through Quality |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | | | |
|  |  |  |  | Assurance, the defects are manually tracked. |  |  |  |  |  |  |  |  |  |  |  | QA\_TestManagementTool\_U | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | sersGuide.docx | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [QA Defect and Issue](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QAToolIssueWorkFlow.vsd) | | |  | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Workflow](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QAToolIssueWorkFlow.vsd) |  | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | QAToolIssueWorkFlow.vsd | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Execute Alpha |  |  | After the analysts have done an initial round of testing, this is the customer’s |  |  | - Customer Test Plan |  |  |  |  |  | Customer (Owner) |  |  |  |  |  |  |  |  |
|  | Test |  |  | first opportunity to test the application and identify defects. |  |  |  |  |  |  |  |  | Analyst |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Develop Training |  |  | Training materials will be created for use in customer training sessions. |  |  | - Training Plan |  |  | - Training Materials |  |  | Customer (Owner) |  |  |  |  |  |  |  |  |
|  | Materials |  |  |  |  |  | Document |  |  |  |  |  | Project Manager |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | - Application Design |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Document |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Develop User |  |  | User Guides and help materials will be created to aid in use of the product. |  |  | - Application Design |  |  | - User Guides |  |  | Customer (Owner) |  |  |  |  |  |  |  |  |
|  | Guides / Help |  |  | Common features and actions should be documented to allow the customer |  |  | Document |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Materials |  |  | to look at a reference material rather than reading the complete |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | documentation. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | | | |
|  | Revise Application |  |  | The Application Deployment Plan should be reviewed and updated as |  |  | - Application |  |  | - Application |  |  | Deployment (Owner) |  |  | [Application Deployment Plan](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDeploymentTemplate.docx) | | | | | |
|  | Deployment Plan |  |  | needed. The work on the “Deployment Forms Checklist” section should |  |  | Deployment Plan |  |  | Deployment Plan |  |  | Development |  |  |  |  |  |  |  |  |
|  |  |  |  | begin at this stage and t the developer begin building the migration |  |  |  |  |  |  |  |  | Analyst |  |  | Intranet: | | | | | |
|  |  |  |  | documents. Work on the Rollout plan should also begin in this phase. |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | pplicationDeploymentTempla | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | te.docx | | | | | |
|  | Communication |  |  | The various forums and communication mechanisms identified in the |  |  | -Communication Plan |  |  | -Various |  |  | Project Manager (Owner) |  |  | Templates for various types | | | | | |
|  |  |  |  | communication plan continue to be performed as the project progresses. As |  |  |  |  |  | communication |  |  | Project Team |  |  | of meetings as well as guides | | | | | |
|  |  |  |  | the project moves into new phases, additional types of communication |  |  |  |  |  | outputs per the |  |  | Portfolio Management |  |  | to using Clarity and | | | | | |
|  |  |  |  | activities may become necessary and activities previously done may need to |  |  |  |  |  | Communication Plan |  |  | Office |  |  | SharePoint can be found in | | | | | |

Page 42 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Construction Phase*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** |  |  |  | **Description** |  | **Inputs** |  | **Outputs** |  | **Owner / Participant** |  | **Links / Notes** | | | | |
|  |  | evolve or be eliminated as participants change or the project focus shifts. | | |  |  |  |  |  |  |  | the [Sharepoint Document](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | [Library.](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  | |
|  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle | | | | |
| Monitor and |  | Throughout the course of a project there are a number recurring activities | | |  | - Project Charter |  | -Updated project |  | Project Manager (Owner) |  | The PMO Monthly Checklist | | | | |
| Control |  | related to keeping the project on track and making adjustments to the plan | | |  | - Communication |  | plan |  | AFM |  | is a good guide for | | | | |
|  |  | when needed. | | At a minimum, these activities include: |  | Plan |  | -Risks, issues, and |  | Portfolio Management |  | monitoring and controlling a | | | | |
|  |  |  |  |  |  | -Project Plan |  | change requests in |  | Office |  | project. | | | | |
|  |  | Managing risks and issues in Clarity | |  |  |  | Clarity |  |  |  |  |  |  |  |  |
|  |  |  | Manage change requests (see note below) | |  |  |  | -Action items in |  |  |  | [PMO Monthly Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/UpdatingAProject-PMOChecklist.pdf) | | | | |
|  |  |  | Following up on tasks and enforcing schedule | |  |  |  | SharePoint |  |  |  |  |  |  |  |  |
|  |  |  | Managing action items in SharePoint | |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  | Updating project plan in Clarity: | |  |  |  |  |  |  |  | Methodology > Project | | | | |
|  |  |  |  | Tasks |  |  |  |  |  |  |  | Management Lifecycle > | | | | |
|  |  |  |  | Resources |  |  |  |  |  |  |  | Guides > UpdatingAProject- | | | | |
|  |  |  |  | Schedule |  |  |  |  |  |  |  | PMOChecklist.pdf | | | | |
|  |  | Complex or large projects may require additional monitoring effort. The | | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | PMO can help in developing reports and tools to keep your project on | | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | budget and on schedule. | | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 43 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Testing Phase*

**Testing Phase**

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| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  | ***Software Development*** |  | 4.4 Testing |  |  |  |
|  | ***Life Cycle*** |  |  |  |  |
|  | **SDLC** |  |  |  |  |  |
| Phase |  | Perform Functional Testing | |  |  |  |
| Inputs |  |  | Perform System Testing | |  | Customer |
| **Customer** |  |  | Sign-Off |
| Business |  | Develop User Guides / Help Materials | User |  |  |
|  |  |  |  |
|  |  | Guides |  |  |
| Rules |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  | Develop Training Materials | | Training |  |
| Customer |  |  | Materials |  |
|  |  |  |  |  |  |
| Test Plan |  |  |  |  | Service |  |
|  |  |  | Compile Service Desk Documents | |  |
|  |  |  | Desk Docs |  |
| Training | **Project Manager** |  | Manage Change Requests |  |  | CR Log |
| Materials |  |  |  |
| User |  |  | Monitor, Control, and Communicate |  |  |  |
|  |  |  |  |  |  |
| Guides |  | Perform Functional Testing | Execute Mock Conversions |  |  |  |
|  |  |  |  |  |
| Project |  |  | Perform System Testing | |  |  |
| Plan |  |  |  |  |  |  |
|  | **Analyst** |  | Manage Defects |  |  |  |
|  |  |  |  |  |  |
| Application |  |  | Revise Application Design |  |  | Application |
| Design |  |  |  |  | Design |
| Application |  |  |  |  |  |  |
| Technical |  | Code Application | Develop Application |  |  |  |
| Overview |  |  |  |  |
|  |  | Code Bug Fixes | Perform Unit Tests | Deploy |  |  |
| CR Log |  | Code Change Request |  |  |  |  |
|  | **Development** |  |  |  |  |
| Defect |  |  |  |  |  | Application |
| Report |  |  |  |  |  |
|  | Database Performance Review | | Revise Application Technical Overview | | Technical |
|  |  |
|  |  | Overview |
|  |  |  |  |  |  |
| Performance |  |  |  |  |  | Performance |
| Test Plan |  |  | Execute Performance Test |  |  |
|  |  |  |  | Test Report |
|  |  |  |  |  |
| Application |  |  | Perform Application Security Scans |  |  | Application |
| Vulnerability |  |  |  |  |
|  |  |  |  | Vulnerability |
| Reports |  |  |  |  |  |
|  |  |  |  |  | Reports |
|  |  |  |  |  |  |
| QA Master | **Quality** |  | Execute Functional Test Cases |  |  |  |
| Test Plan | **Assurance** |  | Test | Defect |  | Revised |
|  |  | Build Functional Test Cases |  | Test Cases |
| Application |  | Cases | Report |  |  |
|  |  |  |  |  |  |
| Deployment |  |  |  |  |  |  |
| Plan |  | Build Automated Test Scripts | Test |  |  |  |
|  |  | Scripts |  | IITAA |  |
|  |  |  | Perform IITAA Accessibility Testing | |  |
| System Test |  |  | Checklist |  |
| Plan |  |  |  |  |  |  |
| Test Cases | **Security** |  | Review Application Vulnerability Reports | |  |  |
|  |  |  |  |  |  |
|  | **Deployment** |  | Revise Application Deployment Plan | | Deployment |  |
|  |  | Plan |  |
| Communic- |  |  |  |  |  |  |
| ation Plan | **Operations** |  | Monitor Performance Tests |  |  |  |
|  |  |  |  |  |

Page 44 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Testing Phase*

**Phase 4.4 – Testing**

The purpose of the Testing phase is to have Quality Assurance, the analysts, and the customers engage in full end-to-end testing of the application to make sure that it functions as specified. Testing was initially started in the Construction phase and focused on ensuring that the major functionality was generally working and that there were no significant deficiencies in the specifications, performance, or security of the application. The testing that occurs in the Testing phase is a more rigorous with emphasis on verifying that the application meets the customers’ needs for production. The types of testing that occur include functional testing of the components performed first by Quality Assurance and the analysts and then the customer; system testing of the components as they work together and interact with other systems; performance testing to ensure that the application is able to properly function during periods of high demand or load; security testing to eliminate any vulnerabilities within the application that may compromise the system or expose data to theft or loss; and accessibility testing to verify that the application meets the Illinois Information Technology Accessibility Act (IITAA) standards. These testing efforts are iterative and overlapping in nature and do not occur sequentially. As issues are discovered, they are categorized as either defects or change requests to the system. Defects indicate that the application is not functioning as specified whereas change requests indicate that the system needs to be enhanced to either provide additional functionality or modification to the functionality as defined. The amount of development work during this phase should be minimized as much as possible in order to stabilize the product. The Customers also utilize this time to finish building user guides and training materials.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  | **Outputs** |  | **Owner / Participant** |  |  | **Links / Notes** | | | |
|  | Build QA |  |  | The effort started during the Construction Phase to build functional test |  |  | - Application Design |  | - Test Cases |  | Quality Assurance |  |  | [QA Mater Test Plan Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/QAMasterTestPlanTemplate.docx) | | | |
|  | Functional Test |  |  | cases continues into the Testing Phase. The functional test cases feed into |  |  | Document |  |  |  | (Owner) |  |  |  |  |  |  |
|  | Cases |  |  | the functional testing performed by the Quality Assurance team. |  |  | - Business Rules |  |  |  | Analyst |  |  | Intranet: | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | QAMasterTestPlanTemplate. | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | docx | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | [QA Test Management Tool](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_TestersGuide.docx) | |  | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Testers Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_TestersGuide.docx) | | | |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | |
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Page 45 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Testing Phase*

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|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  | **Outputs** |  | **Owner / Participant** |  |  | **Links / Notes** | | | | | | | | |  |
|  | Build Automated |  |  | The QA Specialist will be responsible for developing automated test scripts |  |  | - Application Design |  | - Automated Test |  | Quality Assurance |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Test Scripts |  |  | to be used for regression tests in the future. A regression test is a test is |  |  | Document |  | Scripts |  | (Owner) |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | done to ensure that enhancements made or bug-fixes do not introduce new |  |  | - Business Rules |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | errors into an application. |  |  | - Application |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Technical Overview |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Execute QA |  |  | This effort is started during the Construction Phase. The Testing Team will |  |  | - Test Cases |  | - Test Cases |  | Quality Assurance |  |  | [QA Test Management Tool](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_TestersGuide.docx) | | | | | | |  | |  |
|  | Functional Test |  |  | execute the tests that were developed to test the business rules and |  |  | - Test Scripts |  |  |  | (Owner) |  |  | [Testers Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_TestersGuide.docx) | | | | | | | | |  |
|  | Cases |  |  | functionality of the application as defined by the specifications. The test |  |  |  |  |  |  | Analyst |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | results will be documented and defects will be filed. The QA functional |  |  |  |  |  |  | Development |  |  | Intranet: | | | | | | | | |  |
|  |  |  |  | testing should be complete or at least well underway prior to the customer |  |  |  |  |  |  | Customer |  |  | Documentation Library > | | | | | | | | |  |
|  |  |  |  | beginning their functional testing. The Testing Team will continue to |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | | |  |
|  |  |  |  | execute functional tests as changes and fixes are put into the application. |  |  |  |  |  |  |  |  |  | Guides > | | | | | | | | |  |
|  |  |  |  | The customer should not be testing code that has not gone through QA. |  |  |  |  |  |  |  |  |  | QA\_TestManagementTool\_T | | | | | | | | |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | | |  | | | |  |
|  | Perform IITAA |  |  | Applications developed by the University must adhere to the guidelines |  |  | - Application Design |  | - IITAA Test Case |  | Quality Assurance |  |  | [Accessibility Development](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/ApplicationAccessibilityDevelopmentProcess_Overview.docx) | | | | | |  | | |  |
|  | Accessibility |  |  | established by the Illinois Information Technology Accessibility Act (IITAA). |  |  | Document |  | Checklist |  | (Owner) |  |  | [Process Overview](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/ApplicationAccessibilityDevelopmentProcess_Overview.docx) | | | | | | | | |  |
|  | Testing |  |  | Quality Assurance and Development review the application screens for |  |  |  |  |  |  | Developer |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | adherence to the guidelines and issues found are submitted as defects. This |  |  |  |  |  |  |  |  |  | Intranet: | | | | | | | | |  |
|  |  |  |  | review includes manual review of the HTML as well as navigating the |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | | |  |
|  |  |  |  | application using a screen reader tool. |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | | |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | ApplicationAccessibilityDevel | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | opmentProcess\_Overview.do | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | cx | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | [QA IITAA Validation Process](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_IITAA_TestingValidation.doc) | | | | | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | | |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  | QA\_IITAA\_TestingValidation. | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | doc | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | [QA IITAA Application](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/QA_IITAA_AccessibilityChecklist.xls) | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/QA_IITAA_AccessibilityChecklist.xls) | | | |  | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | |  | | | |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | QA\_IITAA\_AccessibilityCheckl | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | ist.xls | | | | | | | | |  |
|  | Execute Mock |  |  | For systems requiring data to be converted from other systems into the new |  |  | - Conversion Strategy |  | - Conversion results |  | Analyst (Owner) |  |  | [Conversion Process Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/ConversionProcessGuide.docx) | | | | | | | | |  |
|  | Conversions |  |  | system, mock conversions are executed to populate the new system with |  |  | - Application Design |  |  |  | Customer |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | converted data. This data should be used for testing of functionality as well |  |  | Document |  |  |  | Development |  |  | Intranet: | | | | | | | | |  |
|  |  |  |  | as for conversion verification. A series of mock conversions are executed in |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | | |  |

Page 46 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Testing Phase*

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|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | | |
|  |  |  |  | order to improve the data quality of the conversion and to practice the |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | |
|  |  |  |  | process of executing the various scripts, programs, manual data entry, and |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle > | | | | |
|  |  |  |  | conversion reconciliation. |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ConversionProcessGuide.doc | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | | | | |
|  | Perform |  |  | As QA wraps up execution of the QA Functional Test Cases, the analyst |  |  | - Business Rules |  |  | -Customer Test Plan |  |  | Customer (Owner) |  |  | [QA Tool Users Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_UsersGuide.docx) | | | | |
|  | Customer |  |  | completes initial functional testing of the application, the customer then |  |  | - Application Design |  |  |  |  |  | Analyst |  |  |  |  |  |  |  |
|  | Functional |  |  | begins their functional testing. As in the previous phase, the testing is |  |  | Document |  |  |  |  |  | Development |  |  | Intranet: | | | | |
|  | Testing |  |  | performed to measure compliance to specifications and business rules as |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  |  | well as adherence to specifications. As issues are identified, they are |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  |  |  | communicated back to the developer and tracked in the Defect and Change |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | | |
|  |  |  |  | Request Management systems. |  |  |  |  |  |  |  |  |  |  |  | QA\_TestManagementTool\_U | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | sersGuide.docx | | | | |
|  | Execute |  |  | As started during the Construction Phase, the Performance Testing of the |  |  | - Performance Test |  |  | - Test Results and |  |  | Quality Assurance |  |  |  |  |  |  |  |
|  | Performance |  |  | application continues. As the testing continues, issues found are addressed |  |  | Plan |  |  | Approval |  |  | (Owner) |  |  |  |  |  |  |  |
|  | Test |  |  | by Development and Operations. The Customer reviews test results and at |  |  | - Performance Test |  |  |  |  |  | Analyst |  |  |  |  |  |  |  |
|  |  |  |  | the end of the testing cycle acknowledges that system performance is |  |  | Scripts (automated) |  |  |  |  |  | Customer |  |  |  |  |  |  |  |
|  |  |  |  | acceptable. |  |  |  |  |  |  |  |  | Operations |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Monitor |  |  | The Operations team monitors the system during performance tests |  |  | - Performance Test |  |  | - Test Results and |  |  | Quality Assurance |  |  |  |  |  |  |  |
|  | Performance |  |  | executed by the Quality Assurance team. Key factors such as memory and |  |  | Plan |  |  | Customer Review |  |  | (Owner) |  |  |  |  |  |  |  |
|  | Tests |  |  | CPU utilization, process counts, and system general health are monitored as |  |  |  |  |  |  |  |  | Operations |  |  |  |  |  |  |  |
|  |  |  |  | the tests occur. |  |  |  |  |  |  |  |  | Development |  |  |  |  |  |  |  |
|  | Database |  |  | During the process of testing, DBAs should enable monitors and perform |  |  | Execution of test |  |  | Performance |  |  | Development (Owner) |  |  |  |  |  |  |  |
|  | Performance |  |  | traces to look for any SQL statements which are poor performing and could |  |  | plans |  |  | Problem |  |  | Quality Assurance |  |  |  |  |  |  |  |
|  | Review |  |  | cause performance issues for the application or compromise the database. |  |  |  |  |  | Notifications |  |  | Analyst |  |  |  |  |  |  |  |
|  |  |  |  | The DBA’s generate and review reports of the most resource intensive |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | statements and notify developers of potential problems and possible tuning |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | options. The analyst, lead QA tester, or lead developers should notify the |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | DBA team when heavy testing will commence so that the monitoring can be |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | put in place. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Perform |  |  | The security testing that started during the Construction Phase continues |  |  | - Application |  |  | - Security Scan |  |  | Quality Assurance |  |  | [Security Scanning Procedure](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/Vulnerability%20Scans/WebAppSecurityScanningProcess.docx) | | | | |
|  | Application |  |  | and is completed during the Testing Phase. All high and medium |  |  | Technical Overview |  |  | Reports |  |  | (Owner) |  |  |  |  |  |  |  |
|  | Security Scans |  |  | vulnerabilities will be corrected prior to production deployment. Any high or |  |  |  |  |  |  |  |  | Security |  |  | Intranet: | | | | |
|  |  |  |  | medium vulnerabilities that are not able to be resolved prior to |  |  |  |  |  |  |  |  | Development |  |  | Documentation Library > | | | | |
|  |  |  |  | implementation must be evaluated and approved as determined by Security, |  |  |  |  |  |  |  |  | Operations |  |  | Methodology > SDLC > | | | | |
|  |  |  |  | Project Management, and Development. |  |  |  |  |  |  |  |  |  |  |  | Guides> Vulnerability Scans > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | WebAppSecurityScanningPro | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | cess.docx | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [AppScan Testers Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/Vulnerability%20Scans/AppScan_TestersGuide.docx) | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | |  | | |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides> Vulnerability Scans > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | AppScan\_TestersGuide.docx | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Customer Requirements and](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/Vulnerability%20Scans/AppScanTestingConsiderationsAndRequirements.docx) | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 47 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Testing Phase*

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|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Considerations](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/Vulnerability%20Scans/AppScanTestingConsiderationsAndRequirements.docx) | | |  | | | | |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides> Vulnerability Scans > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | AppScanTestingConsideration | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | sAndRequirements.docx | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Review |  |  | The Security team reviews the results of the Security Scans that are done. |  |  | - Application |  |  | - Security Scan |  |  | Quality Assurance |  |  |  |  |  |  |  |  |  |  |
|  | Application |  |  | The Security team provides input and assistance in prioritizing vulnerability |  |  | Technical Overview |  |  | Reports |  |  | (Owner) |  |  |  |  |  |  |  |  |  |  |
|  | Vulnerability |  |  | fixes as well as collaboration in identifying false positives. |  |  |  |  |  |  |  |  | Devlopment |  |  |  |  |  |  |  |  |  |  |
|  | Reports |  |  |  |  |  |  |  |  |  |  |  | Security |  |  |  |  |  |  |  |  |  |  |
|  | Manage Defects |  |  | The Defect Management Process started during the Construction phase is |  |  | - Application Design |  |  | - Defect Report |  |  | Analyst (Owner) |  |  | [QA Test Management Tool](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_UsersGuide.docx) | | | | | |  | |
|  |  |  |  | continued during the Testing phase. Defects will continue to be classified |  |  | Document |  |  |  |  |  | Quality Assurance |  |  | [Users Guide](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QA_TestManagementTool_UsersGuide.docx) | | | | | | | |
|  |  |  |  | and fixed as prescribed. The defects remaining at the conclusion of the |  |  |  |  |  |  |  |  | Project Manager |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Testing phase will be reviewed and used by the Customers as part of the |  |  |  |  |  |  |  |  | Development |  |  | Intranet: | | | | | | | |
|  |  |  |  | criteria in determining if the system is ready to proceed. In general, no |  |  |  |  |  |  |  |  | Customer |  |  | Documentation Library > | | | | | | | |
|  |  |  |  | “critical” or “high” defects should be allowed to exist in the system as it is |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | |
|  |  |  |  | deployed into production. |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | QA\_TestManagementTool\_U | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | sersGuide.docx | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [QA Defect and Issue](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QAToolIssueWorkFlow.vsd) | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Workflow](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/QAToolIssueWorkFlow.vsd) | | | |  | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | |  | |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | QAToolIssueWorkFlow.vsd | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | | |  | | |
|  | Revise |  |  | The Application Design Document that was started during the Analysis phase |  |  | - Application Design |  |  | - Revised Application |  |  | Analyst (Owner) |  |  | [Application Design Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDesignTemplate.docx) | | | | | | | |
|  | Application |  |  | will be updated throughout the development process. As changes or |  |  | Document |  |  | Design Document |  |  | Development |  |  |  |  |  |  |  |  |  |  |
|  | Design |  |  | clarifications are made, the document is updated and republished. Any |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | | | |
|  | Document |  |  | change that impacts the scope of the project must be sent through the |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | |
|  |  |  |  | Change Request Management process. This document will be used as the |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | |
|  |  |  |  | standard for determining defects within the Quality Assurance activities. |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ApplicationDesignTemplate.d | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ocx | | | | | | | |
|  | Develop |  |  | The Development and Unit Test cycle continues throughout the Testing |  |  | - Application Design |  |  | - Program Code |  |  | Development (Owner) |  |  | [Application Development](https://intranet.uillinois.edu/departments/aits/Depts/ADS/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2fdepartments%2faits%2fDepts%2fADS%2fShared%20Documents%2fDevelopment%20Standards&/) | | | | | | | |
|  | Application |  |  | phase as defect corrections and change requests are placed into the code |  |  | Document |  |  | - AppWorx Chains |  |  | Analyst |  |  | [standards](https://intranet.uillinois.edu/departments/aits/Depts/ADS/Shared%20Documents/Forms/AllItems.aspx?RootFolder=%2fdepartments%2faits%2fDepts%2fADS%2fShared%20Documents%2fDevelopment%20Standards&/) | | | | |  | | |
|  |  |  |  | base. |  |  | - Application |  |  | - Code Review |  |  | Customer |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Technical Overview |  |  | Documents |  |  |  |  |  | Intranet: | | | | | | | |
|  |  |  |  |  |  |  | - Style Guides |  |  | - Unit Test Results |  |  |  |  |  | Departments > ADSD - | | | | | | | |
|  |  |  |  |  |  |  | - Service Guides |  |  |  |  |  |  |  |  | Application Development and | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Support > Shared Documents | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | > Development Standards | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation > | | | | | | | |

Page 48 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Testing Phase*

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|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  |  | **Outputs** |  |  | **Owner / Participant** |  |  | **Links / Notes** | | | | | |
|  | Perform System |  |  | A Systems Test is both functional and technical in nature. This is “end to |  |  | - System Test Plan |  |  | - Test Results |  |  | Analyst (Owner) |  |  | [Guide for System Test Plans](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/SystemTestingOutline.docx) | | | | | |
|  | Test |  |  | end” testing verifying proper operation of the application in a simulated |  |  |  |  |  |  |  |  | Development |  |  |  |  |  |  |  |  |
|  |  |  |  | environment. The goal is to ensure that the new or modified application has |  |  |  |  |  |  |  |  | Customer |  |  | Intranet: | | | | | |
|  |  |  |  | not detracted or negatively impacted the overall system or service offered. |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  | A formal customer acceptance test plan may be desired for projects of a |  |  |  |  |  |  |  |  |  |  |  | Guides > | | | | | |
|  |  |  |  | larger size and complexity. Typically staff will gather with customers in a |  |  |  |  |  |  |  |  |  |  |  | SystemTestingOutline.docx | | | | | |
|  |  |  |  | room and conduct structured functional tests of the new software. The |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | duration of the testing may last anywhere from several hours to several |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | days. At culmination of the testing the intent is to receive a sign-off from the |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | customers that the software is ready for production. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  | | |  |
|  | Revise |  |  | The Application Technical Overview will be updated as a result of changes |  |  | - Application |  |  | - Revised Application |  |  | Development (Owner) |  |  | [Application Technical](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationTechnicalOverviewTemplate.docx) | | |  | | |
|  | Application |  |  | that occurred during the Testing Phase. |  |  | Technical Overview |  |  | Technical Overview |  |  | Analyst |  |  | [Overview Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationTechnicalOverviewTemplate.docx) | | | | | |
|  | Technical |  |  |  |  |  |  |  |  | Document |  |  |  |  |  |  |  |  |  |  |  |
|  | Overview |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ApplicationTechnicalOvervie | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | wTemplate.docx | | | | | |
|  | Develop User |  |  | The User guides and help materials that were started during the |  |  | - Business Rules |  |  | - User Guides |  |  | Customer (Owner) |  |  |  |  |  |  |  |  |
|  | Guides / Help |  |  | Construction Phase will continue to be developed by the Customers. |  |  | - Application Design |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Materials |  |  |  |  |  | Document |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Develop Training |  |  | Training material creation for use in customer training sessions continues |  |  | - Business Rules |  |  | - Training Materials |  |  | Customer (Owner) |  |  |  |  |  |  |  |  |
|  | Materials |  |  | from the construction phase. |  |  | - Training Plan |  |  |  |  |  | Project Manager |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Document |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | - Application Design |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | Document |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Obtain Customer |  |  | The customer reviews the results from the various testing efforts to confirm |  |  | - Test Results |  |  | - Sign-off |  |  | Project Manager |  |  |  |  |  |  |  |  |
|  | Sign-off |  |  | that the system functions to specification and performs adequately. Sign- |  |  |  |  |  |  |  |  | (Owner) |  |  |  |  |  |  |  |  |
|  |  |  |  | off at this point allows the application to move into the Training Phase. |  |  |  |  |  |  |  |  | Customer |  |  |  |  |  |  |  |  |
|  | Revise |  |  | The Application Deployment Plan should be reviewed and updated as |  |  | - Application |  |  | - Application |  |  | Deployment (Owner) |  |  | [Application Deployment Plan](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDeploymentTemplate.docx) | | | | | |
|  | Application |  |  | needed. The Rollout Plan that was initially built during the Construction |  |  | Deployment Plan |  |  | Deployment Plan |  |  | Development |  |  |  |  |  |  |  |  |
|  | Deployment Plan |  |  | Phase is augmented as development and testing continue throughout the |  |  |  |  |  |  |  |  | Analyst |  |  | Intranet: | | | | | |
|  |  |  |  | Testing Phase. |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | pplicationDeploymentTempla | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | te.docx | | | | | |
|  | Compile Service |  |  | In preparation for eventual deployment, the artifacts needed by the Service |  |  | - Application |  |  | - Chain notes |  |  | Project Manager |  |  | [Application Deployment Plan](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDeploymentTemplate.docx) | | | | | |
|  | Desk Documents |  |  | Desk for support of the application will start to be compiled. The items |  |  | Deployment Plan |  |  | - Knowledge Docs |  |  | (Owner) |  |  |  |  |  |  |  |  |
|  |  |  |  | include chain notes, service ticket queues, FAQ’s and knowledge documents, |  |  | - Application Design |  |  | - FAQ’s |  |  | Analyst |  |  | Intranet: | | | | | |
|  |  |  |  | as well as a general overview of the application and any other special |  |  | Document |  |  |  |  |  | Deployment |  |  | Documentation Library > | | | | | |
|  |  |  |  | support documents. |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | pplicationDeploymentTempla | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | te.docx | | | | | |
|  | Manage Change |  |  | Change requests can be generated during code design, construction and |  |  | - Application Design |  |  | - Change Request Log |  |  | Project Manager |  |  | [Change Request Log](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SoftwareChangeRequestLog.xlsx) | | | | | |
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Page 49 of 67

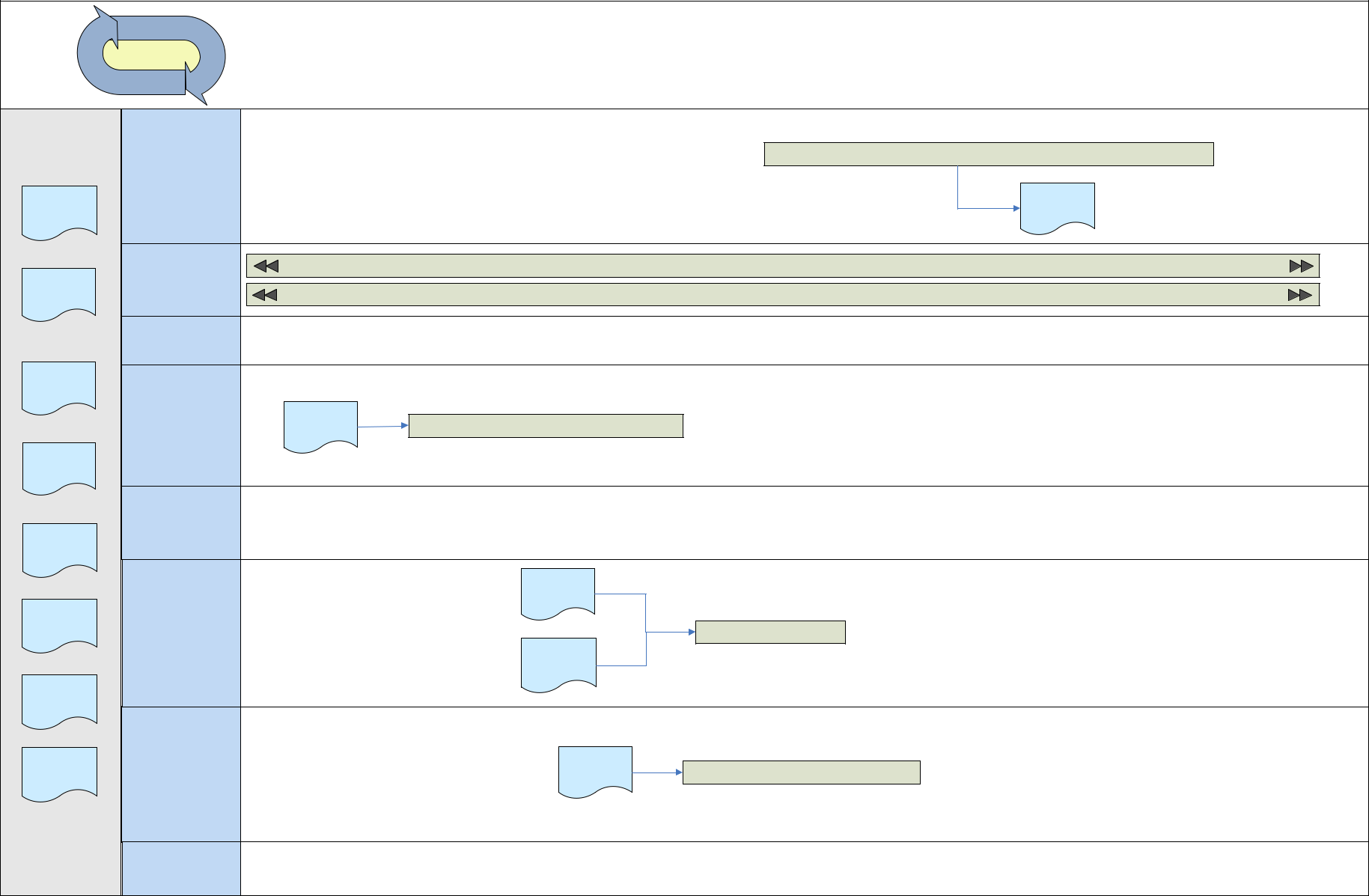
*Project Management Life Cycle: Software Development Life Cycle 2.0: Testing Phase*

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| **Activities** |  |  |  | **Description** |  | **Inputs** |  | **Outputs** |  | **Owner / Participant** |  | **Links / Notes** | | | | | |
| Requests |  | various testing processes. Change requests are defined as features or | | |  | Document |  |  |  | (Owner) |  |  |  |  |  |  |  |
|  |  | functions that the customer would like to have included in the system but | | |  |  |  |  |  | Analyst |  | Intranet: | | | | | |
|  |  | were not included in the specifications in the Application Design Document. | | |  |  |  |  |  | Customer |  | Documentation Library > | | | | | |
|  |  | Change requests are managed by a process that includes prioritizing the | | |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  | request, estimating the amount of work required to include the request in | | |  |  |  |  |  |  |  | Templates and Forms > | | | | | |
|  |  | the system, and setting expectations regarding when the change request | | |  |  |  |  |  |  |  | SoftwareChangeRequestLog.x | | | | | |
|  |  | work will be scheduled. Change requests require the re-initiation of the unit | | |  |  |  |  |  |  |  | lsx | | | | | |
|  |  | testing, deployment, and detailed testing cycle. | | |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | [Change Request Form](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SoftwareChangeRequestTemplate.xlsx) | | |  | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | SoftwareChangeRequestTem | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | plate.xlsx | | | | | |
| Communication |  | The various forums and communication mechanisms identified in the | | |  | -Communication Plan |  | -Various |  | Project Manager |  | Templates for various types | | | | | |
|  |  | communication plan continue to be performed as the project progresses. As | | |  |  |  | communication |  | (Owner) |  | of meetings as well as guides | | | | | |
|  |  | the project moves into new phases, additional types of communication | | |  |  |  | outputs per the |  | Project Team |  | to using Clarity and | | | | | |
|  |  | activities may become necessary and activities previously done may need to | | |  |  |  | Communication Plan |  | Portfolio Management |  | SharePoint can be found in | | | | | |
|  |  | evolve or be eliminated as participants change or the project focus shifts. | | |  |  |  |  |  | Office |  | the [Sharepoint Document](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | [Library.](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | |  | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | |
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|  |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle | | | | | |
| Monitor and |  | Throughout the course of a project there are a number recurring activities | | |  | - Project Charter |  | -Updated project |  | Project Manager |  | The PMO Monthly Checklist | | | | | |
| Control |  | related to keeping the project on track and making adjustments to the plan | | |  | - Communication |  | plan |  | (Owner) |  | is a good guide for | | | | | |
|  |  | when needed. | | At a minimum, these activities include: |  | Plan |  | -Risks, issues, and |  | AFM |  | monitoring and controlling a | | | | | |
|  |  |  |  |  |  | -Project Plan |  | change requests in |  | Portfolio Management |  | project. | | | | | |
|  |  | Managing risks and issues in Clarity | |  |  |  | Clarity |  | Office |  |  |  |  |  |  |  |
|  |  |  | Manage change requests (see note below) | |  |  |  | -Action items in |  |  |  | [PMO Monthly Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/UpdatingAProject-PMOChecklist.pdf) | | | | | |
|  |  |  | Following up on tasks and enforcing schedule | |  |  |  | SharePoint |  |  |  |  |  |  |  |  |  |
|  |  |  | Managing action items in SharePoint | |  |  |  |  |  |  |  | Intranet: | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  | Updating project plan in Clarity: | |  |  |  |  |  |  |  | Methodology > Project | | | | | |
|  |  |  |  | Tasks |  |  |  |  |  |  |  | Management Lifecycle > | | | | | |
|  |  |  |  | Resources |  |  |  |  |  |  |  | Guides > UpdatingAProject- | | | | | |
|  |  |  |  | Schedule |  |  |  |  |  |  |  | PMOChecklist.pdf | | | | | |
|  |  | Complex or large projects may require additional monitoring effort. The | | |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | PMO can help in developing reports and tools to keep your project on | | |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | budget and on schedule. | | |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Page 50 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Training Phase*

**Training Phase**

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|  |  |  |  |  |
|  | ***Software Development*** |  | 4.5 Training | |
|  | ***Life Cycle*** |  |
|  | **SDLC** |  |  |  |
| Phase |  |  |  |  |
| Inputs |  |  |  | Perform Customer Training |
|  | **Customer** |  |  |  |
| Training |  |  |  | Training |
|  |  |  | Feedback / |
| Plan |  |  |  | Surveys |
|  | **Project Manager** |  |  | Monitor and Control |
| Business |  |  | Communicate |
| Rules |  |  |  |
|  | **Analyst** |  |  |  |
| Training |  |  |  |  |
| Materials |  |  |  |  |
|  |  | Application |  |  |
|  | **Development** | Deployment | Stage / Promote Software Artifacts |  |
|  | Plan |  |
|  |  |  |  |
| User |  |  |  |  |
| Guides |  |  |  |  |
|  | **Quality** |  |  |  |
| Application | **Assurance** |  |  |  |
| Deployment |  |  |  |  |
| Plan |  |  |  |  |
|  |  |  | Application |  |
|  |  |  | Deployment |  |
| Access |  |  | Plan |  |
|  |  |  |  |
| Requirements | **Security** |  |  | Establish Security |
| / Controls |  |  |
|  |  |  | Access |  |
|  |  |  | Requirements |  |
|  |  |  | / Controls |  |
| Communic |  |  |  |  |
| -ation Plan |  |  |  |  |
| Project |  |  | Application |  |
| **Deployment** |  | Deployment | Build Training Environment |
| Plan |  |
|  | Plan |
|  | **Operations** |  |  |  |

Page 51 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Training Phase*

**Phase 4.5 – Training**

The purpose of the Training Phase is for the customers to provide formal training to the end-users of the system. The training materials have been built by the customers in earlier phases. The customers utilize the training materials, user guides, help documents, and any other needed materials to train end-users on the functionality of the system as well as needed business processes associated with the system. In preparation of the training, the Development, Security, and Deployment groups may need to build a separate training environment which may include establishing separate databases with special data and training ids and roles. The Training Phase is not always needed in every project and some customers may choose to not perform training or do so on an informal basis.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Activities** | **Description** | **Inputs** | **Outputs** | **Owner /** | **Links / Notes** |
|  |  |  |  | **Participant** |  |
| Build Training | In order to prepare for the training, a new environment may be needed. The | - Deployment Plan |  | Analyst (Owner) |  |
| Environment | environment may consist of new databases, application servers or |  |  | Deployment |  |
|  | deployments, AppWorx chains, new user ids and roles, and manufactured |  |  | Development |  |
|  | training data. Furthermore, the environment may require scheduled |  |  |  |  |
|  | refreshes to restore training data for use in subsequent classes. |  |  |  |  |
| Stage / Promote | To support the training environment, the software components built for the | - Deployment Plan |  | Development (Owner) |  |
| Software | application are staged and promoted into the training environment. The |  |  | Deployment |  |
| Artifacts | process is similar to what is followed for migration the application from |  |  |  |  |
|  | development to test and eventually to production. The deployment plan |  |  |  |  |
|  | previously built is utilized for this effort. |  |  |  |  |
| Manage Training | During training there are various coordination activities that may need to be | - Training Plan |  | Project Manager |  |
| Environments | done to keep the training environment current or prepared for each training |  |  | (Owner) |  |
|  | iteration. Many times these activities require coordinating tasks performed |  |  |  |  |
|  | by the technical support team with the training classes being held by the |  |  |  |  |
|  | customer. These activities may include training database refreshes, loading |  |  |  |  |
|  | new users, coordinating of the deployment of the application or |  |  |  |  |
|  | infrastructure components to get changes or fixes into the training |  |  |  |  |
|  | environment, and/or serving as a point of contact for environment issues. |  |  |  |  |
| Establish | The Security team sets up any ids, roles, privileges, and access needed for | - Deployment Plan |  | Analyst (Owner) |  |
| Security | the trainers and participants. The security setup may mirror how it will be in |  |  | Security |  |
|  | production or it may include granting of additional privileges to allow for |  |  |  |  |
|  | users to experience the full functionality of the system. Reusable generic ids |  |  |  |  |
|  | may also be used for training purposes. |  |  |  |  |
| Perform | The Customer may hold training sessions with end-users of the systems to | - Business Rules | - Training Feedback | Customer (Owner) |  |
| Customer | teach the new functionality and business processes to them. The complexity | Document | and Surveys | Analyst |  |
| Training | of the training may range from informal presentations to departmental staff | - Training Plan |  |  |  |
|  | to formal on-campus training sessions with dedicated training staff. The | - Training Materials |  |  |  |
|  | training materials and user guides previously constructed are used by the |  |  |  |  |
|  | Customers to perform the training. |  |  |  |  |
| Communication | The various forums and communication mechanisms identified in the | -Communication Plan | -Various | Project Manager | Templates for various types |

Page 52 of 67

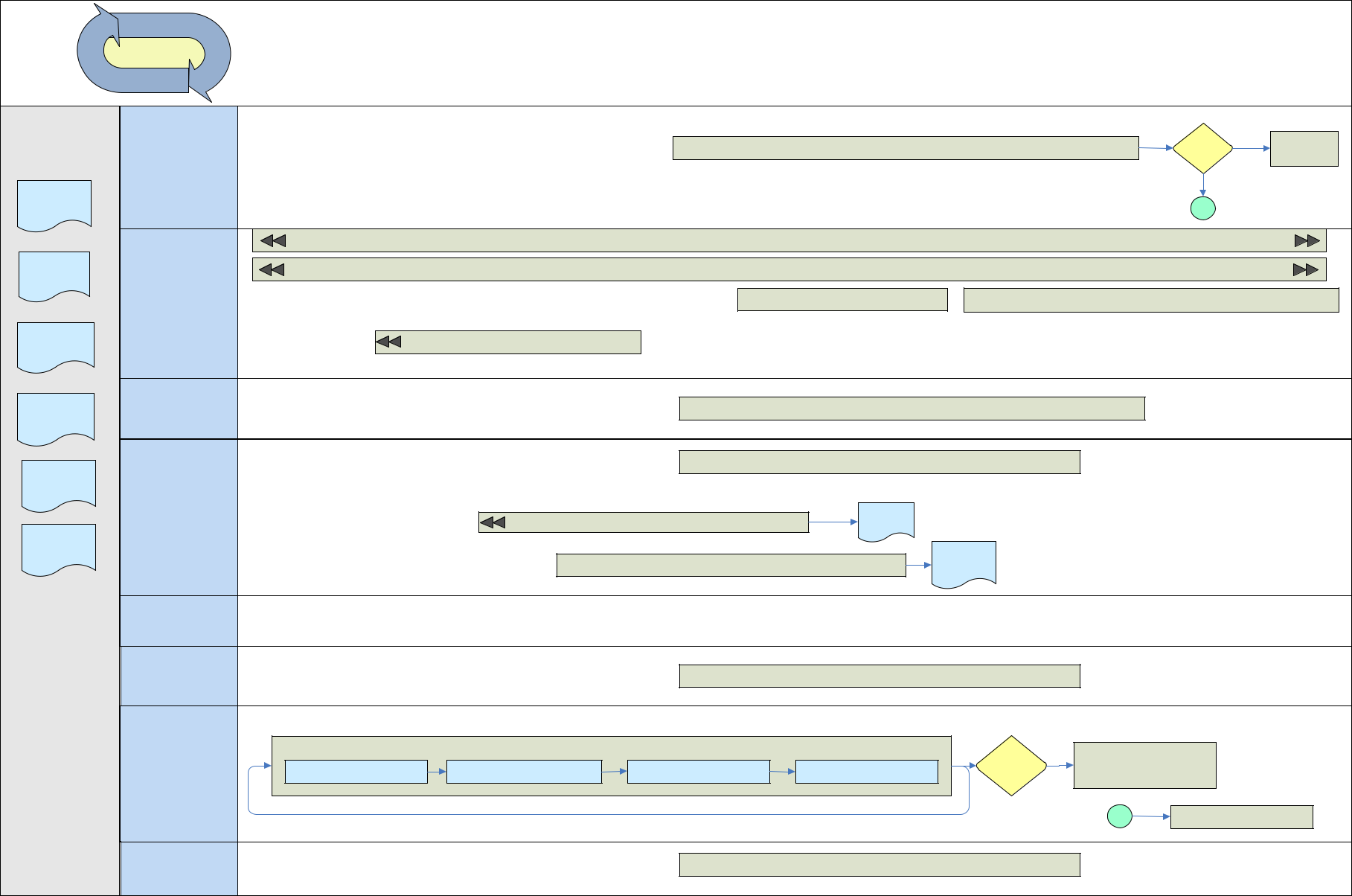
*Project Management Life Cycle: Software Development Life Cycle 2.0: Training Phase*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** |  |  |  | **Description** |  | **Inputs** |  | **Outputs** |  | **Owner /** |  | **Links / Notes** | | | | |
|  |  |  |  |  |  |  |  |  |  | **Participant** |  |  |  |  |  |  |
|  |  | communication plan continue to be performed as the project progresses. As | | |  |  |  | communication |  | (Owner) |  | of meetings as well as guides | | | | |
|  |  | the project moves into new phases, additional types of communication | | |  |  |  | outputs per the |  | Project Team |  | to using Clarity and | | | | |
|  |  | activities may become necessary and activities previously done may need to | | |  |  |  | Communication Plan |  | Portfolio Management |  | SharePoint can be found in | | | | |
|  |  | evolve or be eliminated as participants change or the project focus shifts. | | |  |  |  |  |  | Office |  | the [Sharepoint Document](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | | | | |
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|  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle | | | | |
| Monitor and |  | Throughout the course of a project there are a number recurring activities | | |  | - Project Charter |  | -Updated project |  | Project Manager |  | The PMO Monthly Checklist | | | | |
| Control |  | related to keeping the project on track and making adjustments to the plan | | |  | - Communication |  | plan |  | (Owner) |  | is a good guide for | | | | |
|  |  | when needed. | | At a minimum, these activities include: |  | Plan |  | -Risks, issues, and |  | AFM |  | monitoring and controlling a | | | | |
|  |  |  |  |  |  | -Project Plan |  | change requests in |  | Portfolio Management |  | project. | | | | |
|  |  | Managing risks and issues in Clarity | |  |  |  | Clarity |  | Office |  |  |  |  |  |  |
|  |  |  | Manage change requests (see note below) | |  |  |  | -Action items in |  |  |  | [PMO Monthly Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/UpdatingAProject-PMOChecklist.pdf) | | | | |
|  |  |  | Following up on tasks and enforcing schedule | |  |  |  | SharePoint |  |  |  |  |  |  |  |  |
|  |  |  | Managing action items in SharePoint | |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  | Updating project plan in Clarity: | |  |  |  |  |  |  |  | Methodology > Project | | | | |
|  |  |  |  | Tasks |  |  |  |  |  |  |  | Management Lifecycle > | | | | |
|  |  |  |  | Resources |  |  |  |  |  |  |  | Guides > UpdatingAProject- | | | | |
|  |  |  |  | Schedule |  |  |  |  |  |  |  | PMOChecklist.pdf | | | | |
|  |  | Complex or large projects may require additional monitoring effort. The | | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | PMO can help in developing reports and tools to keep your project on | | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | budget and on schedule. | | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 53 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Deployment Phase*

**Deployment Phase**

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|  |  |  |  |  |  |  |  |  |  |
|  | ***Software Development*** |  | 4.6 Deployment | |  |  |  |  |  |
|  | ***Life Cycle*** |  |  |  |  |  |  |
|  | **SDLC** |  |  |  |  |  |  |  |  |
| Phase |  |  |  |  |  |  |  |  |  |
| Inputs |  |  |  |  | Conduct Production Readiness Testing | |  | Go / No Go Go | Application |
|  |  |  |  |  | Decision | Live |
| **Customer** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | No Go |  |
| Project Plan |  |  |  |  |  |  |  | 1 |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  | Monitor and Control | |  |  |  |  |
| Application |  |  |  | Communicate | |  |  |  |  |
| Technical |  |  |  |  |  |  |  |
| Overview | **Project** |  |  |  |  |  |  |  |  |
|  |  |  |  | Submit Change Control |  | Communicate Event to Enterprise | |  |
|  | **Manager** |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Access |  |  | Service Desk Turnover |  |  |  |  |  |  |
| Requirements |  |  |  |  |  |  |  |  |
| / Controls |  |  |  |  |  |  |  |  |  |
| Application | **Analyst** |  |  |  | Conduct Production Readiness Testing | |  |  |  |
| Deployment |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Plan |  |  |  |  |  |  |  |  |  |
| Communic- |  |  |  |  | Stage / Promote Software Artifacts | |  |  |  |
|  |  |  |  |  |  |  |  |  |
| ation Plan |  |  |  |  |  |  |  |  |  |
|  | **Development** |  |  |  | Application |  |  |  |  |
|  |  | Revise Application Technical Overview | | Technical |  |  |  |  |
|  |  |  | Overview |  |  |  |  |
| Service Desk |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Docs |  |  |  |  |  | Deployment |  |  |  |
|  |  |  | Complete Application Deployment Checklist | | |  |  |  |
|  |  |  | Checklist |  |  |  |
|  | **Quality** |  |  |  |  |  |  |  |  |
|  | **Assurance** |  |  |  |  |  |  |  |  |
|  | **Security** |  |  |  | Establish Security |  |  |  |  |
|  |  |  | Execute Dress Rehearsal | |  | Change | Execute Go Live | |  |
|  |  | Build Roll Out Plan | Prepare Environment | Migrate Artifacts | Conduct Production | Control |  |
|  | **Deployment** | Roll Out |  |  |
|  | Readiness Testing | Approval |  |  |
|  |  |  |  |  |  |  | 1 | Execute Backout | |
|  | **Operations** |  |  |  | Stage / Promote Software Artifacts | |  |  |  |
|  |  |  |  |  |  |  |  |  |

Page 54 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Deployment Phase*

**Phase 4.6 – Deployment**

The purpose of the Deployment Phase is to practice the migration of the application and all of its associated components to a pre-production environment and once that has been successful to follow the same process to migrate the application to production. Through repeated practice of the migration, holes in the deployment plan as well as environmental differences are identified that could potentially jeopardize the production roll-out. The roll-out into production should follow the same process as the dress rehearsals and should be performed by the same individuals. The customers and analysts perform Production Readiness Testing (PRT) in the dress rehearsals and production roll-out. PRT touches various pieces of functionality and configuration to verify that the migration of the components was successful; it is not meant to be a regression test of the application. At the conclusion of the roll-out, the customer determines if the roll-out is acceptable in production. If it is decided that the system is a No-Go, then back out procedures may be executed to remove the application from production and restore the systems to their prior state.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  | **Description** |  | **Inputs** |  |  | **Outputs** |  |  | **Owner /** |  |  | **Links / Notes** | | | | | |
|  |  |  |  |  |  |  |  |  |  |  | **Participant** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Revise |  | The Application Technical Overview will be updated and a final copy will be |  | - Application |  |  | - Revised Application |  |  | Development (Owner) |  |  | [Application Technical](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationTechnicalOverviewTemplate.docx) | | | |  | |
|  | Application |  | produced. |  | Technical Overview |  |  | Technical Overview |  |  | Analyst |  |  | [Overview Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationTechnicalOverviewTemplate.docx) | | | | | |
|  | Technical |  |  |  |  |  |  | Document |  |  |  |  |  |  |  |  |  |  |  |
|  | Overview |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | ApplicationTechnicalOverview | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Template.docx | | | | | |
|  | Complete |  | The Developer completes the deployment checklist in preparation of |  | - Application |  |  | - Application |  |  | Development (Owner) |  |  | [Application Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/Migration%20Forms/CC_Application_Checklist.rtf) | | | | | |
|  | Application |  | deploying the application into production. |  | Technical Overview |  |  | Checklist |  |  |  |  |  | [Procedure](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/Migration%20Forms/CC_Application_Checklist.rtf) | | |  | | |
|  | Deployment |  |  |  | - Application |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Checklist |  |  |  | Deployment Plan |  |  |  |  |  |  |  |  | Intranet: | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Migration Forms> | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | CC\_Application\_Checklist.rtf | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Report Checklist Procedure](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/Migration%20Forms/CC_Report_Checklist.rtf) | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | Migration Forms> | | | | | |

Page 55 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Deployment Phase*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Activities** |  | **Description** |  | **Inputs** |  | **Outputs** |  | **Owner /** |  | **Links / Notes** | | | |  |  |
|  |  |  |  |  |  |  |  |  |  | **Participant** |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | CC\_Report\_Checklist.rtf | | | |  |  |
|  |  | Stage / Promote |  | For both dress rehearsals and migration to production, the software |  | - Application |  |  |  | Development (Owner) |  | [Application Deployment](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/ApplicationsDeploymentProcess.docx) | | | |  |  |
|  |  | Software |  | components built for the application are staged and promoted into the dress |  | Deployment Plan |  |  |  | Deployment |  | [Process](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/ApplicationsDeploymentProcess.docx) | |  | |  |  |
|  |  | Artifacts |  | rehearsal and production environments. The process for the migrations |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | during the dress rehearsals and production migration should be as similar to |  |  |  |  |  |  |  | Intranet: | | | |  |  |
|  |  |  |  | each other as possible. The deployment plan previously built is utilized for |  |  |  |  |  |  |  | Documentation Library > | | | |  |  |
|  |  |  |  | this effort. |  |  |  |  |  |  |  | Methodology > SDLC > Guides> | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | ApplicationsDeploymentProces | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | s.docx | | | |  |  |
|  |  | Execute Dress |  | In advance of deploying the project to Production, rollout dress rehearsals |  | - Application |  | - Rollout Plan |  | Deployment (Owner) |  | [Rollout Planning Process](https://cvs.admin.uillinois.edu/aits/documentation/PoliciesStandards/Deployment/DeploymentStandards/Weekly%20Rollout%20Planning%20Process.rtf?rev=HEAD) | | | |  |  |
|  |  | Rehearsal |  | may be performed to validate the deployment plan and practice the |  | Deployment Plan |  | - PRT Test Results |  | Project Manager |  |  |  |  |  |  |  |
|  |  |  |  | deployment processes. As part of the dress rehearsals, the following |  |  |  |  |  | Customer |  | Intranet: | | | |  |  |
|  |  |  |  | activities occur: |  |  |  |  |  | Analyst |  | Documentation Library > | | | |  |  |
|  |  |  |  |  |  |  |  |  |  | Development |  | Methodology > SDLC > Guides> | | | |  |  |
|  |  |  |  | - Build Rollout Plan |  |  |  |  |  |  | WeeklyRolloutPlanningProcess | | | |  |  |
|  |  |  |  |  |  |  |  |  | Quality Assurance |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | .docx | | | |  |  |
|  |  |  |  |  |  |  |  |  |  | Security |  |  |  |
|  |  |  |  | The primary focus of this step is to create a Rollout Plan. The Rollout Plan |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | documents all the various activities the participating groups need to |  |  |  |  |  | Operations |  |  |  |  |  |  |  |
|  |  |  |  | undertake during the time of deployment of the new or modified system. |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | The Deployment Plan that was previously built is used as the starting point |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | for the Rollout plan. |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | The information in the standard Rollout Plan includes the following: |  |  |  |  |  |  |  |  |  |  |  |  |  |

* Step Number
* Task Description
* Dependencies
* Related Document
* Comments
* Hand-off / Notification
* Responsibility
* Duration in Minutes
* Start Date and Time
* Finish Date and Time

- Prepare Environment

The dress rehearsal environment is prepared or refreshed for the next dress

rehearsal. This may include refreshing one or more databases, restoring

Appworx chains from production, running jobs (such as paycalc) to place the

database in a similar state as what will be experienced during the rollout in

production. The goal is to prepare the environment to be as close to what

production will be like during the go-live rollout.

- Perform Roll Out

The roll out is the migration of and artifacts, conversions, and execution of

Page 56 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Deployment Phase*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Activities** | **Description** | **Inputs** | **Outputs** | **Owner /** | **Links / Notes** |
|  |  |  |  | **Participant** |  |

manual steps such as data entry to completely migrate the application into

the dress rehearsal environment. The steps for the deployment are

documented in the deployment plan.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | - Conduct Production Readiness Testing |  |  |  |  |  |  |  |  |  |
|  | The Production Readiness Testing is executed by the customers or customer |  |  |  |  |  |  |  |  |  |
|  | proxy to validate the implementation in production. This PRT is done exactly |  |  |  |  |  |  |  |  |  |
|  | the same way in dress rehearsals as is done in production. |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | | | | | | |
| Submit Change | - Rollout Plan | - Change Control | Project Manager | [General Change Control](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/AITSChangeControlManagementGuide.docx) | | | | | | |
| Control | Submitting a Change Control Request is the first step in the larger overall |  | (Owner) | [Procedures](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/AITSChangeControlManagementGuide.docx) | | | | | |  |
| process referred to as Change Management. |  |
|  |  |  |  |  |  |  |  |  |  |
|  | Change Control is the process that ensures that all changes are controlled. |  |  | Intranet: | | | | | | |
|  | This includes the submission, recording, analysis, decision making and |  |  | Documentation Library > | | | | | | |
|  | approval of the change. |  |  | Methodology > SDLC > Guides> | | | | | | |
|  | Most ITPC and internal projects would be viewed as “Major changes”. |  |  | ChangeControlManageme | | | | | | |
|  |  |  | ntGuide.docx | | | | | | |
|  | Major changes should always be wrapped in a comprehensive |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | documentation package that includes: appropriate user approvals; user |  |  | Application Procedures: | | | | | | |
|  | training and signoffs when appropriate; an attestation that testing has been |  |  |
|  | conducted, reviewed with the user, and accepted by the user; back-out |  |  |  |  |  |  |  |  |  |
|  | plans; a detailed roll-out plan that includes success criteria, decision point |  |  |  | [Process](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/CC_Application_Process.docx) | | | | | |
|  | documentation, escalation and notification procedures; etc. Major changes |  |  |  |  |  |  |  |  |  |
|  | shall be approved by a management person who is no more than one level |  |  |  | Intranet: | | | | | |
|  | below a member of the Senior Management team, and the approval of a |  |  |  | Documentation Library > | | | | | |
|  | major change should be accompanied by a formal review of the |  |  |  |
|  |  |  |  | Methodology > SDLC > | | | | | |
|  | documentation package. |  |  |  |
|  |  |  |  | Guides> | | | | | |
|  |  |  |  |  |
|  |  |  |  |  | CC\_Application\_Process.doc | | | | | |
|  |  |  |  |  | x | | | | | |
|  |  |  |  |  | [Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/Migration%20Forms/CC_Application_Checklist.rtf) | | |  | | |
|  |  |  |  |  | Intranet: | | | | | |
|  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  | Methodology > SDLC > | | | | | |
|  |  |  |  |  | Templates and Forms > | | | | | |
|  |  |  |  |  | Migration Forms > | | | | | |
|  |  |  |  |  | CC\_Application\_Checklist.rtf | | | | | |
|  |  |  |  | Report Procedures: | | | | | | |
|  |  |  |  |  | [Process](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/CC_Report_Process.docx) | |  | | | |
|  |  |  |  |  | Intranet: | | | | | |

Page 57 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Deployment Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  | **Description** | |  |  | **Inputs** |  | **Outputs** |  | **Owner /** |  |  | **Links / Notes** | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | **Participant** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Guides> | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | CC\_Report\_Process.docx | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | [Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/Migration%20Forms/CC_Report_Checklist.rtf) |  | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Migration Forms > | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | CC\_Report\_Checklist.rtf | | |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | | | |
|  | Service Desk |  |  | Prior to go live, the project team will meet with the Service Desk to review | |  |  | - Chain notes |  |  |  | Project Manager |  |  | [Application Deployment Plan](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDeploymentTemplate.docx) | | | |
|  | Turnover |  |  | the application and associated support items such as chain notes, ticketing | |  |  | - Knowledge Docs |  |  |  | (Owner) |  |  |  |  |  |  |
|  |  |  |  | queues, FAQ’s, anticipated problems/questions, escalation procedures, | |  |  | - FAQ’s |  |  |  | Operations |  |  | Intranet: | | | |
|  |  |  |  | system documentation. Members of the project team may help in the | |  |  |  |  |  |  | Analyst |  |  | Documentation Library > | | | |
|  |  |  |  | support transition by working at the Service Desk for a period of time after | |  |  |  |  |  |  | Deployment |  |  | Methodology > SDLC > | | | |
|  |  |  |  | the roll-out. | |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | pplicationDeploymentTemplat | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | e.docx | | | |
|  | Communicate |  |  | Effective communication of a major event such as the deployment of a new | |  |  | - Change Control |  | - Event Notice |  | Project Manager |  |  |  |  |  |  |
|  | Event to |  |  | system or upgrade is not limited to just one phase step, but rather requires | |  |  | - Communications |  |  |  | (Owner) |  |  |  |  |  |  |
|  | Enterprise |  |  | activity at different times throughout several of the phases of the PMLC. | |  |  | Plan |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | The communication process includes: | |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Add requested events to the deployment timeline |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Work with the stakeholders through ESC/TAM to obtain approval prior |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | to approving the timeline |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Review and approve the dates during the scheduling committee (based |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | on stakeholder feedback, business events, holidays, etc) |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Publish the appropriate event on the status page, which sends an |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | email to all list serve subscribers |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Send an event notice based on the information in the Event Data |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | sheet. |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Post the event progress on the go-live web site |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Send final event notice that system is live |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  | | | |
|  | Migrate |  |  | This step involves the deployment of new project artifacts to production. | |  |  | - Rollout Plan |  | - Production System |  | Deployment (Owner) |  |  | [Application Deployment Plan](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDeploymentTemplate.docx) | | | |
|  | Software |  |  | Typical activities that occur during deployment might include: | |  |  | - Deployment |  |  |  | Operations |  |  |  |  |  |  |

Page 58 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Deployment Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** |  | **Description** | |  |  | **Inputs** |  | **Outputs** | **Owner /** |  | **Links / Notes** | | | | |
|  |  |  |  |  |  |  |  |  | **Participant** |  |  |  |  |  |  |
| Artifacts into |  |  |  |  |  | Checklists |  |  | Development |  | Intranet: | | | | |
| Production |  | Pre-Deployment Activities |  |  |  |  |  | Analyst |  | Documentation Library > | | | | |
| Environment |  |  | Prepare CVS for Upgrade |  |  |  |  |  | Customer |  | Methodology > SDLC > | | | | |
|  |  |  | Prepare LDAP / LDIF Files |  |  |  |  |  | Project Manager |  | Templates and Forms > | | | | |
|  |  |  | Conduct System Shutdown |  |  |  |  |  |  |  | ApplicationDeploymentTempla | | | | |
|  |  |  | Perform Software Upgrade |  |  |  |  |  |  |  | te.docx | | | | |
|  |  |  | Apply Patches and Modifications |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Migrate Software Tree |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Perform Miscellaneous Database Activities |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Implement Configuration Changes |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Implement Security Changes |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Migrate AppWorx and Parameter Editor Items |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Migrate Reports |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Migrate Developed Applications |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Bring Up System for Production Readiness Test |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | |  |  |  |  |  |  |  |  | | | | |
| Establish |  | The Security team sets up any ids, roles, privileges, and access needed for | |  |  | - Rollout Plan |  |  | Security (Owner) |  | [Access Requirements](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityAccessRequirementsTemplate.doc) | | |  | |
| Security |  | users and support staff in production. This may include bulk loads of users | |  |  | - Security Access / |  |  |  |  | [Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityAccessRequirementsTemplate.doc) | | | | |
|  |  | and assignment of credentials as well as controlled on-going management of | |  |  | Controls |  |  |  |  |  |  |  |  |  |
|  |  | credentials as users are added to the system. Typically users are loaded en | |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  | masse at go live, but user security will need to go through more formal | |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  | request and provisioning procedures as the application stabilizes in | |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  | production. | |  |  |  |  |  |  |  | Templates and Forms > | | | | |
|  |  |  |  |  |  |  |  |  |  |  | SecurityAccessRequirementsTe | | | | |
|  |  |  |  |  |  |  |  |  |  |  | mplate.doc | | | | |
|  |  |  |  |  |  |  |  |  |  |  | [Baseline Access Control](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityBaselineAccessControlReviewForApplications.docx) | | | | |
|  |  |  |  |  |  |  |  |  |  |  | [Review Template](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityBaselineAccessControlReviewForApplications.docx) | |  | |  |
|  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | |
|  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |
|  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | |
|  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | |
|  |  |  |  |  |  |  |  |  |  |  | SecurityBaselineAccessControl | | | | |
|  |  |  |  |  |  |  |  |  |  |  | ReviewForApplications.docx | | | | |
| Conduct |  | After the deployment of the new project artifacts to the dress rehearsal or | |  |  | - Rollout Plan |  | - PRT Results and | Analyst (Owner) |  |  |  |  |  |  |
| Production |  | production environment, a Production Readiness Test (PRT) is performed to | |  |  | - PRT Test Plan |  | Sign-Off | Customer |  |  |  |  |  |  |
| Readiness |  | ensure that all of the components migrated successfully and is operating and | |  |  |  |  |  | Deployment |  |  |  |  |  |  |
| Testing |  | that the deployment has not caused any unintended effects on system | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | operability. Normally, there are predefined scripts or subjects that are | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | tested during a PRT that touch as many of the areas of the system as | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | possible. PRT is performed by the customer or a proxy for the customer who | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | is able to make the decision to accept the application as it is in production. | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | PRT typically is geared to be executed in a short time frame and is not meant | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | to be a full regression test of the application. | |  |  |  |  |  |  |  |  |  |  |  |  |
| Make Go / No- |  | After production PRT is complete, the customer reviews the results of the | |  |  | - PRT Results and |  |  | Project Manager |  |  |  |  |  |  |
| Go Decision |  | PRT and any known issues and makes a determination of whether the | |  |  | Sign-Off |  |  | (Owner) |  |  |  |  |  |  |

Page 59 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Deployment Phase*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  | **Description** | |  |  | **Inputs** |  | **Outputs** |  | **Owner /** | **Links / Notes** | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  | **Participant** |  |  |  |  |  |  |
|  |  |  | system is ready to be opened up to all users. If there are issues that are | | |  |  |  |  |  | Customer |  |  |  |  |  |  |
|  |  |  | critical and prevent the system from going live, then the back out | | |  |  |  |  |  | Deployment |  |  |  |  |  |  |
|  |  |  | procedures are executed. | | |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Execute Back Out |  | If the implementation of the application into production is unsuccessful and | | |  | - Deployment Plan |  | -Restored Production |  | Deployment (Owner) |  |  |  |  |  |  |
|  |  |  | a No-Go decision is made, then the Back Out Procedures documented within | | |  |  |  | System |  | Operations |  |  |  |  |  |  |
|  |  |  | the deployment plan are executed. This may include actions such as simply | | |  |  |  |  |  | Development |  |  |  |  |  |  |
|  |  |  | shutting the application down or restricting access to it in production or it | | |  |  |  |  |  | Analyst |  |  |  |  |  |  |
|  |  |  | may require a full back out of the source code, chains, configuration | | |  |  |  |  |  | Customer |  |  |  |  |  |  |
|  |  |  | settings, other deployed artifacts as well as restoring data. At the | | |  |  |  |  |  | Project Manager |  |  |  |  |  |  |
|  |  |  | completion of the backout, a Production Readiness Test is executed to | | |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | confirm that the production environment is back to the pre-rollout state. | | |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Communication |  | The various forums and communication mechanisms identified in the | | |  | -Communication Plan |  | -Various |  | Project Manager | Templates for various types of | | | | |  |
|  |  |  | communication plan continue to be performed as the project progresses. As | | |  |  |  | communication |  | (Owner) | meetings as well as guides to | | | | |  |
|  |  |  | the project moves into new phases, additional types of communication | | |  |  |  | outputs per the |  | Project Team | using Clarity and SharePoint | | | | |  |
|  |  |  | activities may become necessary and activities previously done may need to | | |  |  |  | Communication Plan |  | Portfolio Management | can be found in the [Sharepoint](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) | | | | |  |
|  |  |  | evolve or be eliminated as participants change or the project focus shifts. | | |  |  |  |  |  | Office | [Document Library.](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2Fdepartments%2Faits%2Fdocumentcenter%2FMethodology%2FProject%20Management%20Lifecycle&View=%7BFA2530E6%2DC1D4%2D4EB5%2D8408%2D5896E92EB588%7D) |  |  | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle | | | | |  |
|  | Monitor and |  | Throughout the course of a project there are a number recurring activities | | |  | - Project Charter |  | -Updated project |  | Project Manager | The PMO Monthly Checklist is | | | | |  |
|  | Control |  | related to keeping the project on track and making adjustments to the plan | | |  | - Communication |  | plan |  | (Owner) | a good guide for monitoring | | | | |  |
|  |  |  | when needed. | | At a minimum, these activities include: |  | Plan |  | -Risks, issues, and |  | AFM | and controlling a project. | | | | |  |
|  |  |  |  |  |  |  | -Project Plan |  | change requests in |  | Portfolio Management |  |  |  |  |  |  |
|  |  |  |  | Managing risks and issues in Clarity | |  |  |  | Clarity |  | Office | [PMO Monthly Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/UpdatingAProject-PMOChecklist.pdf) | | | | |  |
|  |  |  |  | Manage change requests (see note below) | |  |  |  | -Action items in |  |  |  |  |  |  |  |  |
|  |  |  |  | Following up on tasks and enforcing schedule | |  |  |  | SharePoint |  |  | Intranet: | | | | |  |
|  |  |  |  | Managing action items in SharePoint | |  |  |  |  |  |  | Documentation Library > | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | |  |
|  |  |  |  | Updating project plan in Clarity: | |  |  |  |  |  |  | Management Lifecycle > | | | | |  |
|  |  |  |  |  | Tasks |  |  |  |  |  |  | Guides > UpdatingAProject- | | | | |  |
|  |  |  |  |  | Resources |  |  |  |  |  |  | PMOChecklist.pdf | | | | |  |
|  |  |  |  |  | Schedule |  |  |  |  |  |  |  |  |  |  |  |  |

Complex or large projects may require additional monitoring effort. The

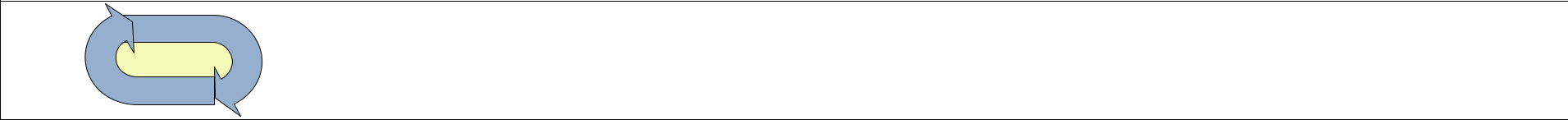
PMO can help in developing reports and tools to keep your project on

budget and on schedule.

Page 60 of 67

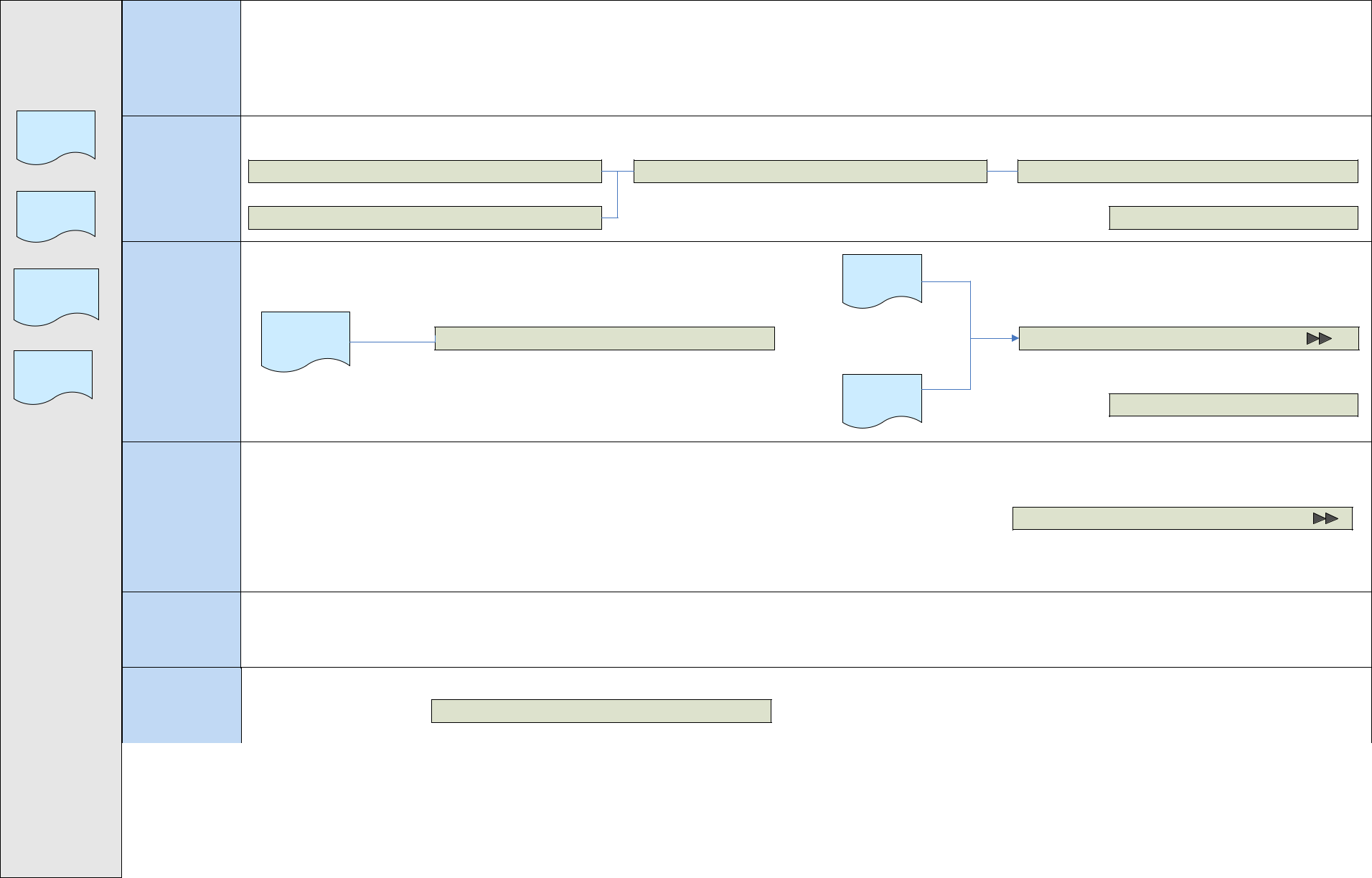
*Project Management Life Cycle: Software Development Life Cycle 2.0: Close Phase*

**Close Phase**

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|  |  |
| --- | --- |
| ***Life Cycle*** | 4.7 Close |
| ***Software Development*** |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **SDLC** |  |  |  |  |
| Phase |  |  |  |  |  |
| Inputs | **Customer** |  |  |  |  |
|  |  |  |  |  |
| User Guides |  |  |  |  |  |
|  | **Project** | Conduct Stakeholder Satisfaction Survey | | Conduct Post Project Review Meeting | Organize and Store Final Project Documentation |
|  | **Manager** |  |  |  |  |
| Application |  |  |  |  |  |
| Design |  |  | Gather Lessons Learned |  | Close Project in Clarity |
|  |  |  |  | ITPC |  |
| Application |  |  |  | Enhancement |  |
| Technical |  |  |  | Requests |  |
| Overview |  |  |  |  |  |
|  |  | Production |  |  |  |
|  | **Analyst** | Support | Provide Short Term Post Project Suport | | Provide Production Support |
|  |  | Requests |  |  |  |
| Project Plan |  |  |  |  |  |
|  |  |  |  | Work |  |
|  |  |  |  | Requests | Decommission Application |
|  | **Development** |  |  |  | Provide Production Support |
|  | **Quality** |  |  |  |  |
|  | **Assurance** |  |  |  |  |



|  |  |
| --- | --- |
| **Security** | Security Review and Cleanup |
|  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| **Deployment** |  | Post Deployment Review |  | Development Environment Cleanup |  |
|  |  |  |  |  |  |
| **Operations** |  |  |  |  |  |
|  |  |  |  |  |  |

Page 61 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Close Phase*

**Phase 5.1 – Close**

The purpose of the Close Phase is to wrap up the project and move into production support mode. A post project review is held where both activities that went well and areas of improvement are identified. The final documents for the project are stored and archived for future reference. The Application Design, Technical Overview, and Service Guides remain living documents and are revised as changes are made in the application. Once in production support mode, the application undergoes changes due to defect corrections or enhancements that are requested in the system. Whenever these changes are made, various components of the SDLC may be used to facilitate the implementation. As such, the SDLC is a continuous process and is not only followed for new application development.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  | **Description** |  |  | **Inputs** |  | **Outputs** | **Owner / Participant** |  | **Links / Notes** | | | | | | | | | |
|  | Post Deployment |  |  | After completion of a formal rollout activity, the Deployment team conducts |  |  | Rollout Plan |  | Post Go-Live Review | Deployment (Owner) |  | [Post Go-Live Review](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/PostGoliveRolloutSummaryTemplate.docx) | | | |  | | | | | |
|  | Review |  |  | a Post Deployment or Post Go-Live Review. Most rollouts occur over the |  |  |  |  | Document |  |  | [Document](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/PostGoliveRolloutSummaryTemplate.docx) | | | | | | | | | |
|  |  |  |  | weekend and there is a standing Post Go-Live Review meeting set for |  |  | Application |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Tuesdays at 3:10 PM. All rollout participants are required to attend this |  |  | Deployment Plan |  |  |  |  | Intranet: | | | | | | | | | |
|  |  |  |  | meeting and Managers are encouraged to attend. The Deployment |  |  |  |  |  |  |  | Documentation Library > | | | | | | | | | |
|  |  |  |  | Specialist who was involved in the planning and execution of the rollout will |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | | | |
|  |  |  |  | prepare a Post Go-Live review document and share that with all the |  |  |  |  |  |  |  | Templates and Forms > | | | | | | | | | |
|  |  |  |  | participants. Issues and Concerns will be documented for future |  |  |  |  |  |  |  | PostGoliveRolloutSummary | | | | | | | | | |
|  |  |  |  | Deployments. |  |  |  |  |  |  |  | Template.docx | | | | | | | | | |
|  | Development |  |  | After the project is complete and has been deployed to production, the |  |  | Application |  |  | Deployment (Owner) |  | [Application Deployment](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDeploymentTemplate.docx) | | | | | | |  | | |
|  | Environment |  |  | Deployment team will follow up with the appropriate staff to ensure any |  |  | Deployment Plan |  |  |  |  | [Plan](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/ApplicationDeploymentTemplate.docx) | | | | | | | | | |
|  | Cleanup |  |  | infrastructure components are removed as defined in Post Deployment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | section of the Application Deployment Plan. |  |  |  |  |  |  |  | Intranet: | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Templates and Forms > | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | ApplicationDeploymentTem | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | plate.docx | | | | | | | | | |
|  | Environment |  |  | After the application is migrated to production and before the project is |  |  | Application |  |  | Security (Owner) |  | [Security Post Project](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityPostProjectEnvironmentReviewandCleanup.docx) | | | | |  | | | | |
|  | Review and |  |  | closed, access granted to developers, testers and administrative IDs in QA, |  |  | Deployment Plan |  |  |  |  | [Cleanup and Review](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityPostProjectEnvironmentReviewandCleanup.docx) | | | |  | | | | | |
|  | Cleanup |  |  | DEV and TEST environments and distribution list/security groups needed |  |  |  |  |  |  |  | [Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Templates%20and%20Forms/SecurityPostProjectEnvironmentReviewandCleanup.docx) | | | | | | | | | |
|  |  |  |  | only for the project must be reviewed. The review should determine either |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | the |  |  |  |  |  |  |  | Intranet: | | | | | | | | | |
|  |  |  |  | (1) access is needed for on-going support or |  |  |  |  |  |  |  | Documentation Library > | | | | | | | | | |
|  |  |  |  | (2) access is not needed for on-going support and must be |  |  |  |  |  |  |  | Methodology > SDLC > | | | | | | | | | |
|  |  |  |  | removed. |  |  |  |  |  |  |  | Forms and Templates > | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | SecurityPostProjectEnviron | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | mentReviewandCleanup.do | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | cx | | | | | | | | | |
|  | Gather Lessons |  |  | Prior to the Post Project Review/Project Closing meeting, the project |  |  | Lessons Learned |  | Lessons learned | Project Manager |  | [Questions that can be used](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/LessonsLearnedQuestions.pdf) | | | | | | | | |  |
|  | Learned |  |  | manager will send a list of selected project team members and stakeholders |  |  | questions |  |  | (Owner) |  | [in addition to the survey to](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/LessonsLearnedQuestions.pdf) | | | | | | | |  | |
|  |  |  |  | to receive a combined Lessons Learned and Stakeholder Satisfaction survey. |  |  |  |  |  |  |  | [gather Lessons Learned](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/LessonsLearnedQuestions.pdf) and | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  | | | | | |  | | | |
|  |  |  |  | The results will be gathered by the PMO, entered into Clarity, and passed |  |  |  |  |  |  |  | to help organize lessons | | | | | | | | | |
|  |  |  |  | onto the project manager so that results can be reviewed with the team |  |  |  |  |  |  |  | learned discussions can be | | | | | | | | | |
|  |  |  |  | during the meeting. |  |  |  |  |  |  |  | found in the SharePoint | | | | | | | | | |
|  |  |  |  | The review of lessons learned is part of the post project review meeting |  |  |  |  |  |  |  | Document Library. | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 62 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Close Phase*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** |  |  | **Description** |  | **Inputs** | **Outputs** |  | **Owner / Participant** |  |  | **Links / Notes** | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Intranet: | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle > | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Guides> | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | LessonsLearnedQuestions.p | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | df | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | [Project Survey Process for](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/ProjectSurveyProcess.pdf) | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | [PMO](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/ProjectSurveyProcess.pdf) | | | | | |  | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
|  | Conduct |  |  | Conducting the Stakeholder Satisfaction Survey will allow us to gather |  | - Project Charter | - Stakeholder |  | Project Manager |  |  | [Project Survey Process for](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/ProjectSurveyProcess.pdf) | | | | | | | | |
|  | Stakeholder |  |  | feedback from customers as well as project team members in order to |  |  | Satisfaction Surveys |  | (Owner) |  |  | [PMO](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/ProjectSurveyProcess.pdf) | | | | | |  | | |
|  | Satisfaction |  |  | continually improve our project delivery and customer service. The survey |  |  |  |  | Portfolio Management |  |  |  |  |  |  |  |  |  |  |  |
|  | Survey |  |  | will be sent to and customer project participants as well as the |  |  |  |  | Office (Owner) |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | customer project leadership to gather feedback about the effectiveness of |  |  |  |  | Project Sponsor |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | the project management and the project itself. This survey is sent as part of |  |  |  |  | Customers |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | the lessons learned survey above. The project manager will request for the |  |  |  |  | Project Team |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | PMO to send out the survey well in advance of the post project review |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | meeting. The results will be gathered by the PMO and passed onto the |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | project manager so that results can be reviewed with the team during the |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | meeting. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | |  | |  |  | | |  |
|  | Conduct Project |  |  | Conducting the project closing meeting will allow the project team and the |  | - Stakeholder | Project Closing |  | Project Manager |  |  | [A template for the Project](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/TEMPLATE%20ProjectClosingAgendaAndNotes.dotx) | | | | | | |  | |
|  | Closing Meeting |  |  | customer project participants and leadership to gather one last time to |  | Satisfaction Surveys | Meeting Notes |  | (Owner) |  |  | [Closing Meeting](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Templates%20and%20Forms/TEMPLATE%20ProjectClosingAgendaAndNotes.dotx) can be | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  | | |  |
|  |  |  |  | ensure that there are no outstanding issues or work. This will also provide a |  | -Lessons Learned |  |  | Customer |  |  | found in the SharePoint | | | | | | | | |
|  |  |  |  | forum to review lessons learned throughout the project. The project |  | - Post Project Review |  |  | Analyst |  |  | Document Library. | | | | | | | | |
|  |  |  |  | manager will send an agenda to participants a week or more in advance of |  | Agenda |  |  | Development |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | the scheduled meeting. The project manager will include in the agenda any |  | - Project Plan |  |  | Quality Assurance |  |  | Intranet: | | | | | | | | |
|  |  |  |  | lessons learned and results from the stakeholder satisfaction survey. |  |  |  |  | Security |  |  | Documentation Library > | | | | | | | | |
|  |  |  |  | Participants will add additional items to the Lessons Learned section of the |  |  |  |  | Deployment |  |  | Methodology > Project | | | | | | | | |
|  |  |  |  | agenda and return it to the project manager at least 3 days prior to the |  |  |  |  | Operations |  |  | Management Lifecycle > | | | | | | | | |
|  |  |  |  | meeting. The project manager will then compile the lessons learned |  |  |  |  | Portfolio Management |  |  | Templates and Forms > | | | | | | | | |
|  |  |  |  | feedback for review during the meeting. PMO will maintain a repository of |  |  |  |  | Office |  |  | TEMPLATE | | | | | | | | |
|  |  |  |  | lessons learned and will periodically communicate these to the department. |  |  |  |  |  |  |  | ProjectClosingAgendaAndN | | | | | | | | |
|  |  |  |  | The Post Project Review agenda should include: 1) Outstanding items |  |  |  |  |  |  |  | otes.dotx | | | | | | | | |
|  |  |  |  | 2)Project performance against budget, schedule, and scope 3)Lessons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | learned 4) Other topics, such as information from the ADSD Post Project |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | Review |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | | | | | | | | |
|  | Organize and |  |  | Organizing and storing the final project documentation will ensure that all |  | PMLC and SDLC | - Final copies of all |  | Project Manager |  |  | [A guide to archiving project](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/ArchivingProjectAndApplicationData.pdf) | | | | | | | | |
|  | Store Final |  |  | documentation is in one central location. The purpose of doing this is to |  | artifacts | project |  | (Owner) |  |  | [and application data](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/ArchivingProjectAndApplicationData.pdf) is | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | |  | |  |  | | | |
|  | Project |  |  | provide a single location for project documentation archives. The PMO will |  |  | documentation |  | Portfolio Management |  |  | available in the SharePoint | | | | | | | | |
|  | Documentation |  |  | work with the project manager to ensure this work is completed. |  |  |  |  | Office |  |  | Document Library. | | | | | | | | |
|  |  |  |  | Development documentation will remain with the application in the |  |  | - Stored Project |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | appropriate CVS locations within the project or the documentation trees. |  |  | Documentation |  |  |  |  | Intranet: | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle > | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Guides> | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | ArchivingProjectAndApplica | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | tionData.pdf | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | In addition, [the table that](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Index%20of%20Deliverables%20and%20Storage%20Locations.xlsx) | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Page 63 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Close Phase*

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Activities** | **Description** | **Inputs** | **Outputs** | **Owner / Participant** |  |  | **Links / Notes** | | |
|  |  |  |  |  |  |  |  | [identifies all PMLC and SDLC](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Index%20of%20Deliverables%20and%20Storage%20Locations.xlsx) | |  |
|  |  |  |  |  |  |  |  | [deliverables](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Index%20of%20Deliverables%20and%20Storage%20Locations.xlsx) with initial and | | |
|  |  |  |  |  |  |  |  |  |  | |
|  |  |  |  |  |  |  |  | ultimate locations is | | |
|  |  |  |  |  |  |  |  | available in the Document | | |
|  |  |  |  |  |  |  |  | Library. | | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | Intranet: | | | | | |
|  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  | Methodology > Index of | | | | | |
|  |  |  |  |  | Deliverables and Storage | | | | | |
|  |  |  |  |  | Locations.xlsx | | | | | |
|  |  | |  |  |  | | | | | |
| Ongoing activity: | Throughout the course of a project there are a number of recurring activities | | -Communication Plan -Various | Project Manager | Templates for various types | | | | | |
| Communicate | related to communication. These include the activities identified in the | | communication | (Owner) | of meetings and resulting | | | | | |
| (Implement | communication plan, which typically consist of: | | outputs per the | Project Team | notes can be found in the | | | | | |
| Communication |  |  | Communication Plan | Portfolio Management | [SharePoint Document](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2fdepartments%2faits%2fdocumentcenter%2fMethodology%2fProject%20Management%20Lifecycle) | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
| Plan) | Weekly project team status reports (Template provided which |  | Office | [Library under Methodology](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2fdepartments%2faits%2fdocumentcenter%2fMethodology%2fProject%20Management%20Lifecycle) | | | | | |
|  |  | offers a standardized agenda for status meetings throughout the |  |  | [> Project Management](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2fdepartments%2faits%2fdocumentcenter%2fMethodology%2fProject%20Management%20Lifecycle) | | | | |  |
|  |  |  |  |  |  | |  |  | | |
|  |  | course of a project) |  |  | [Lifecycle >](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Forms/AllItems.aspx?RootFolder=%2fdepartments%2faits%2fdocumentcenter%2fMethodology%2fProject%20Management%20Lifecycle) as well as guides | | | | | |
|  |  |  |  |  | |  | | | |
|  | Maintaining SharePoint workspace with meeting agendas, |  |  | to using Clarity and | | | | | |
|  |  | minutes, decisions, documentation, and status reports. |  |  | SharePoint | | | | | |
|  |  | Project sponsor meetings for reviewing significant project plan |  |  |  |  |  |  |  |  |
|  |  | changes and progress |  |  |  |  |  |  |  |  |
|  |  | Informal communication: walk-abouts, hallway conversations, |  |  |  |  |  |  |  |  |
|  |  | and personal emails |  |  |  |  |  |  |  |  |

There are enhanced processes and requirements regarding project

monitoring and control for large projects (those with greater than 5,000

hours of effort or $250,000) or any projects deemed of sufficient risk. These

should be identified in the project communication plan, but are outlined

here as well.

For these projects it is advisable that a Steering Committee or Oversight

Group be formed to monitor the project execution and collaborate on key

project decisions. Templates for Large Projects are included as follows:

* Steering Committee Reporting Template – This is a reporting package for periodic steering committee meetings and includes standardized sections for:

o Project Timeline

o Significant Event Review o Significant Risks / Issues o Metric Tracking

o Change Request and Defect Tracking

1. Budget Report
   1. Other

* Large Project Budget Workbook – This is a multi-tabbed Excel spreadsheet for tracking actual versus budgeted costs for internal/external labor and non-labor items.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | All projects of this nature will have a unique set of circumstances which will |  |  |  |
|  | require extensive customization of the communication plan. |  |  |  |
| Provide Short | Providing short term post project support will ensure that any issues that | - Production Support | - Production Fixes | Analyst (Owner) |

Page 64 of 67

*Project Management Life Cycle: Software Development Life Cycle 2.0: Close Phase*

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| **Activities** |  | **Description** |  |  | **Inputs** |  | **Outputs** |  | **Owner / Participant** |  |  | **Links / Notes** | | | | | |
| Term Post |  | arise with the product of the project can be addressed in a timely manner. |  |  | Requests |  | and Documentation |  | Development |  |  |  |  |  |  |  |  |
| Project Support |  | This will help provide the best customer service possible. By tracking |  |  |  |  | Revisions |  |  |  |  |  |  |  |  |  |  |
|  |  | the short term support as part of the original project rather than lumping |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | support hours in with all other support will allow us to track how successful |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | the initial implementation was. This task will remain an active task on the |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | project plan for one month following implementation. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Provide |  | Once the application is in production it moves into production support |  |  | - ITPC Templates |  | - Application Design |  | Analyst (Owner) |  |  |  |  |  |  |  |  |
| Production |  | mode. As defects are discovered or enhancements requested the |  |  | - Work Requests |  | Document |  | Development |  |  |  |  |  |  |  |  |
| Support |  | application continues to be revised. The work that is requested on the |  |  | - Application Design |  | - Application |  | Deployment |  |  |  |  |  |  |  |  |
|  |  | application varies in size and scope and depending on the effort required, |  |  | Document |  | Technical Overview |  |  |  |  |  |  |  |  |  |  |
|  |  | new ITPC templates may be generated requiring project teams to work on |  |  | - Application |  | - Service Guides |  |  |  |  |  |  |  |  |  |  |
|  |  | the application or small development efforts may be done using a single |  |  | Technical Overview |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | resource. Components of the SDLC will be engaged dependent upon the size |  |  | - Service Guides |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | of the development effort required and what is needed. The Application |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Design Document, Application Technical Overview, and Service Guides will |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | all remain updated as application changes are implemented. Production |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Support is an ongoing process and exists outside of the project. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Project Close in |  | Once the project is completed, either the Project Management Office or the |  |  |  |  |  |  | Project Manager |  |  | [A guide to closing a project](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/ClosingAProjectInClarity.pdf) | | | | |  |
| Clarity |  | project manager will close the project in Clarity following the instructions |  |  |  |  |  |  | (Owner) |  |  | [in Clarity](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/ClosingAProjectInClarity.pdf) is available in the | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
|  |  | provided in “Guide to closing a project in Clarity” document. This includes |  |  |  |  |  |  |  |  |  | SharePoint Document | | | | | |
|  |  | updating all tasks, resolving and closing all risks/issues/changes, updating |  |  |  |  |  |  |  |  |  | Library | | | | | |
|  |  | the project properties page with final status, and updating the PMLC |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | lifecycle page. |  |  |  |  |  |  |  |  |  | Intranet: | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Documentation Library > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Methodology > Project | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Management Lifecycle > | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | Guides> | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | ClosingAProjectInClarity.pdf | | | | | |
| Decommission |  | When an application has reached the end of its life, it will need to be |  |  | - Application |  | - Application |  | Analyst (Owner) |  |  | [Application](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/ApplicationDecommissioningProcess.docx) | |  | | | |
| Application |  | decommissioned. An application may be decommissioned due to a change |  |  | Technical Overview |  | Technical Overview |  | Project Manager |  |  | [Decommissioning Process](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/ApplicationDecommissioningProcess.docx) | | | |  | |
|  |  | in business practices, expense, or the function of the application may be |  |  | - Application Design |  |  |  | Development |  |  | [Guide and Checklist](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/SDLC/Guides/ApplicationDecommissioningProcess.docx) | | | | | |
|  |  | performed by another system. Each application is unique, but there are key |  |  | Document |  |  |  | Deployment |  |  |  |  |  |  |  |  |
|  |  | steps that should be followed to disable the application, analyze the |  |  | - Service Guides |  |  |  | Customer |  |  | Intranet: | | | | | |
|  |  | components of the application, and then remove the pieces that comprise |  |  |  |  |  |  | Quality Assurance |  |  | Documentation Library > | | | | | |
|  |  | the system. There may also be a need to convert or archive the data for |  |  |  |  |  |  | Security |  |  | Methodology > SDLC > | | | | | |
|  |  | future reference. |  |  |  |  |  |  | Deployment |  |  | Guides > | | | | | |
|  |  |  |  |  |  |  |  |  | Operations |  |  | ApplicationDecommissionin | | | | | |
|  |  |  |  |  |  |  |  |  | Portfolio Management |  |  | gProcess.docx | | | | | |
|  |  |  |  |  |  |  |  |  | Office |  |  |  |  |  |  |  |  |

Page 65 of 67

*Project Management Life Cycle: Software Development Life Cycle: Index of Deliverables*

**Software Development Life Cycle documentation concludes on the previous page.**

**Phase 5.2: Post Close**

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|  |  | **Activities** |  |  | **Description** |  | **Inputs** | **Outputs** |  | **Owner / Participant** |  |  | **Links / Notes** | | |
|  |  | Conduct Six |  |  | Conducting the Six Month Post Project Survey will allow to gather |  | - Project Charter | - Six Month Post |  | Portfolio Management Office |  |  | [Project Survey](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/ProjectSurveyProcess.pdf) | | |
|  |  | Month Post |  |  | customer feedback after the product has been in place for a significant |  |  | Project Surveys |  | (Owner) |  |  | [Process](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Project%20Management%20Lifecycle/Guides/ProjectSurveyProcess.pdf) | |  |
|  |  | Project Survey |  |  | amount of time. It will also allow us to revisit the anticipated benefits of the |  |  |  |  | Project Manager |  |  |  |  |  |
|  |  |  |  |  | project in order to analyze the accuracy of the original estimates. The |  |  |  |  | Project Sponsor |  |  |  |  |  |
|  |  |  |  |  | survey will be sent by the PMO to the Customer six months after project |  |  |  |  | Customer |  |  |  |  |  |
|  |  |  |  |  | implementation. Results will be gathered and summarized, shared with the |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | project team and analyzed across all projects by the PMO staff. |  |  |  |  |  |  |  |  |  |  |
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Page 66 of 67

*Project Management Life Cycle: Software Development Life Cycle: Index of Deliverables*

[The Index of Deliverables and Storage Locations](https://intranet.uillinois.edu/departments/aits/documentcenter/Methodology/Index%20of%20Deliverables%20and%20Storage%20Locations.xlsx) can be found in the SharePoint Document Library in the Methodology folder.

Page 67 of 67