

<b>DigitalHome Development Process Script – 9/16/2010</b>	
<b>Purpose</b>	Guide the development of the DigitalHome software system.
<b>Entry Criteria</b>	<ul style="list-style-type: none"> <li>• Identification of a problem or opportunity, which may need a software solution.</li> </ul>
<b>Phase</b>	<b>Activity</b>
Project Inception Note: Not completed by DH Development Team	<ul style="list-style-type: none"> <li>• establish the business case and feasibility for the project.</li> <li>• determine the scope of the project.</li> <li>• develop a customer need statement.</li> <li>• develop a high-level requirements document</li> </ul>
Project Launch	<ul style="list-style-type: none"> <li>• establish development team, and their roles, responsibilities and goals.</li> <li>• analyze Need Statement</li> <li>• establish a Development Process</li> <li>• identify External Interfaces and create Context Diagram</li> <li>• create a Conceptual Design</li> <li>• determine a Development Strategy</li> <li>• research and study of possible project technology</li> </ul>
Planning	<ul style="list-style-type: none"> <li>• develop Task, Schedule, and Resource Plans</li> <li>• develop a Risk Plan</li> <li>• develop a Quality Plan</li> <li>• develop a Configuration Management Plan</li> <li>• determine project standards and tools</li> <li>• perform project planning/tracking</li> </ul>
Analysis	<ul style="list-style-type: none"> <li>• review the Need Statement and prepare for requirements elicitation</li> <li>• elicit requirements from potential customers and users</li> <li>• analyze requirements and build object-oriented analysis models</li> <li>• specify and documents requirements in an SRS</li> <li>• inspect and revise the SRS</li> <li>• obtain customer agreement to requirements</li> <li>• develop a System Test Plan</li> <li>• develop Requirements Traceability Matrix (RTM)</li> <li>• develop User Manual</li> <li>• track, monitor and update plans (Task/Schedule/Quality/CM/Risk) &amp; RTM</li> </ul>
Architectural Design	<ul style="list-style-type: none"> <li>• develop OO high-level design models <ul style="list-style-type: none"> <li>➢ refine the OO analysis models</li> <li>➢ develop additional design models</li> <li>➢ specify and document design in an SDS (Software Design Specification)</li> </ul> </li> <li>• develop a Build/Integration Plan</li> <li>• review and revise the SDS</li> <li>• consult with customer, and revise SRS and SDS, as appropriate</li> <li>• track, monitor and update plans (Task/Schedule/Quality/CM/Risk) &amp; RTM</li> </ul>
Construction Increment 1, 2, ...	<ul style="list-style-type: none"> <li>• complete Class Specifications (data types and operation logic)</li> <li>• develop Increment (Class/Integration) Test Plan</li> <li>• set up appropriate test environment (e. g., test harness, stubs/drivers)</li> <li>• review the Class Specifications</li> <li>• write source code</li> <li>• review and test the source code</li> <li>• integrate code with previous increments</li> </ul>

	<ul style="list-style-type: none"> <li>• perform Increment (Class/Integration) Test</li> <li>• consult with customer, and revise SRS, SDS, and code, as appropriate</li> <li>• track, monitor and update plans (Task/Schedule/Quality/CM/Risk) &amp; RTM</li> </ul>
System Test	<ul style="list-style-type: none"> <li>• update test environment</li> <li>• update System Test Plan</li> <li>• perform the System Test</li> <li>• consult with customer, and revise requirements, design and code as appropriate</li> <li>• track, monitor and update plans (Task/Schedule/Quality/CM/Risk) &amp; RTM</li> </ul>
Acceptance Test	<ul style="list-style-type: none"> <li>• prepare Acceptance Test materials (including a user's manual)</li> <li>• set up customer test environment</li> <li>• customer performs Acceptance Test</li> <li>• revise SRS, SDS, code, and User Manual as appropriate</li> <li>• track, monitor and update plans (Task/Schedule/Quality/CM/Risk) &amp; RTM</li> </ul>
Postmortem	<ul style="list-style-type: none"> <li>• perform postmortem analysis of project process and product quality</li> </ul>
<b>Exit Criteria</b>	<ul style="list-style-type: none"> <li>• completed SRS, SDS, RTM, User Manual, System Test Plan</li> <li>• source code for a thoroughly reviewed and tested program</li> <li>• completed plan documentation</li> <li>• project postmortem report</li> </ul>