**Process Specification**

**Introduction**

The process specification is a method used to document the overall process of creating and developing the deliverables required by the course CPT\_S 484 Software Requirements. To do this, we will be using the IDEF0 diagram modeling technique. Ideally, the diagram will cover all the processes our team has executed, along with the control variables, inputs, outputs, and feedback that went into the delivery of the requested items.

**Tools**

The IDEF0 diagrams presented used two tools. First, the method was developed by the designers of the SADT modeling technique under commission by the US Airforce. The resource for finding more information on it can be found here:

*https://www.idef.com/idefo-function\_modeling\_method/*

Secondly, the diagram modeling tool used is called LucidChart and can be found here:

*https://www.lucidchart.com/*

**Objectives**

The purpose of these IDEF0 diagrams is to show how our team started at point A (getting the assignment) and ending up at point B (submitting the assignment). The final deliverables will include:

* A Final Project Plan,
* A Vision document,
* A Process Specification (this document),
* A WRS document,
* A Prototype,
* A Demonstration.

**Node A – 0: Overall Process**

Diagram

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Notes:

* Assignment (assigned) starts with the beginning of the CPT\_S 484 course. The Assignment (completed) includes all deliverables (addressed in the objectives section above).
* Standards & Templates and Assignment Grades & Feedback are provided by the instructor.
* The Design Team includes Scott Hawkins, Kirubel Worede, and Zicheng Gu.

**Node A – 1: Preliminary Design**

Diagram

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Notes:

* Accessible Technology & Programs includes Visual Studio and IntelliJ along with other resources listed in the accompanying documentation.

**Node A – 13: Set Up Project**

Diagram

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**Node A2: Initial Development (Phase 1)**

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Notes:

* Grading & Feedback is taken from that given to the Preliminary Design and will be applied selectively.
* *Create Prototype* and *Develop Manual* are only meant to be cycled through once or twice.
* *Define Requirements* and *Develop Requirements* will include deliverable documents for phase 1; the main focus will be on the WRS.

**Node A – 23: Create Prototype**

Diagram

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Notes:

* Testing Tools & Methodologies will include plug-ins for the Visual Studio and IntelliJ coding IDEs as well as standard practices (i.e. unit testing).
* Although roles are assigned to each process, all team members are encouraged to participate in the development of the prototype.
* Integrate External Features means to get data from processes the application must interact with (i.e. the phone’s GPS system, etc.).

**Node A – 3: Iterative Prototyping (Phase 2)**

Diagram

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Notes:

* Per course requirements, changes will be introduced to the documentation to practice incorporating into workflow
* The *Readdress Prototype* Process is an iterative process.

**Node A – 33: Readdress Prototype**

Diagram

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Notes:

Although similar to Node A – 23, there should not be any need to reestablish external features.