System Requirements

Visual Programming Environment Framework

Version 1.0 – November 2016

**Using This Template**

This and other PDM tools are available. All Sections are required to be addressed, however if a section or subsection is not needed, that section/subsection of the document can be marked as Not Applicable but as explanation must be provided as to why it does not apply. Please also reference the **Lessons Learned** section in the Appendix for additional information that may assist.

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**Template Revision History**

| **Version** | **Date** | **Name** | **Description** |
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| 1.0 |  | Project Team |  |
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Project Delivery Methodology (PDM)

**System Requirements**

**Visual Programming Environment Framework**

VERSION: 1.0 REVISION DATE: November

Approval of the System Requirements indicates an understanding of the purpose and content described in this deliverable. By signing this deliverable, each individual agrees with the content contained in this deliverable.

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| **Approver Name** | **Title** | **Signature** | **Date** |
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# Section 1 Purpose

The purpose of this framework is to allow users to provide their clients a graphical representation of concepts defined in their application.

# Section 2 General System Requirements

## 2.1 Major System Capabilities

### High-Level

* The framework must allow users to create a visual programming environment within their application
  + The environment must be able to visually represent the models and constructs defined in the host application as specified by the user
  + The environment must be able visually represent the possible interactions between the constructs within the host application
  + The environment must provide a method for execution that generates an output based on the host application’s business logic

### Lower-Level

* The framework must allow users to represent their constructs visually in the environment
  + The framework should allow its user to specify editable data members of a construct
  + The framework should allow its user to specify how a particular construct can interact with other constructs.
* The framework must allow the user to define the interactions between constructs
  + The framework should allow users to specify restraints on the collaborations of constructs.

## 2.2 Major System Conditions

*Specify major system assumptions and/or constraints (aka conditions). The conditions may limit the options available to the designer/developer. For example:*

*- System must use the FDOT Enterprise GIS Framework*

*- System must use FDOT Enterprise Document Management System*

*- System must interface with Bank of America credit card payment system*

## 2.3 System Interfaces

*Describe the dependency and relationship requirements of the system to other enterprise/external systems. Include any interface to a future system or one under development. For clarity, a graphical representation of the interfaces should be used when appropriate.*

## 2.4 System User Characteristics

*Identify each type of user of the system by function, location, and type of device. Specify the number of users in each group and the nature of their use of the system.*

# Section 7 Initial System Architecture

*Specify the data platform, hardware, software, programming languages, tools and operating system requirements for the application or project.*

1. *Identify any specialized hardware requirements that must be purchased or upgraded prior to development, or in support of the implementation, of the application or project.*
2. *Identify any specialized software requirements that must be purchased or upgraded prior to development, or in support of the implementation, of the application or project.*
3. *Identify any programming languages and tools selected for the development of the application or project.*
4. *Identify any network/operating system or combination of network/operating systems that will be used for the development of the application of project.*

# Section 8 System Acceptance Criteria

*Specify the general system acceptance criteria specified and agreed upon by the project sponsor and key stakeholders that will be used to accept the final end product. For example:*

* *New system must run in parallel with current production system for x months*
* *3 years of data must be in system (conversion implied) on day one*

⇒

# Section 9 Current System Analysis

*If a current system exists, perform analysis on the system and describe how the current system is used by the business. Specify data conversion requirements, relevant data flows, system interfaces to existing systems, reporting capability, etc.*

*⇒*

# Section 10 References

*Provide a list of all documents and other sources of information referenced in this document and utilized in its development. Include for each the document number, title, date, and responsible office/author.*

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| **Document No.** | **Document Title** | **Date** | **Author** |
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# Section 11 Glossary

*Define of all terms and acronyms required to properly interpret the requirements contained within this document.*

# Section 12 Document Revision History

*Identify revisions to the document starting with initial creation. This section should be updated when an approval is required (i.e. initial creation, change request, new mandated change, etc)*

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# Section 13 Appendices

*Include any relevant appendices.*