0077 Net2Html5 (aka Silver Lining)

Project Charter (PC)

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Revision & Sign-off Sheet

**Document Properties**

| Item | Details |
| --- | --- |
| Document Title | <Project Name> Business Model (BM) |
| Author |  |
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**Change Record**

| Date | Author | Version | Change Reference |
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**Reviewers**

| Name | Position | Version Approved | Date |
| --- | --- | --- | --- |
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**Project Authorization**

By placing your signature below, you indicate your approval and acceptance of this Statement of Work to be complete and accurate portrayal of the project objectives.

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| --- | --- | --- | --- |
| Name |  |  |  |
| Title  Division | Signature |  | Date |
| Name |  |  |  |
| Title  Division | Signature |  | Date |
| Name |  |  |  |
| Title  Division | Signature |  | Date |

# Executive Summary

The purpose of this project will be to provide a framework for converting .NET applications written in C# to TypeScript/Javascript and HTML5. The ultimate goal (later scope) is to convert the Hydra application, with the intermediate result of providing a framework that will be promoted as an open source, extensible platform for commercial use. The platform will be extensible for allowing any type of .NET application to be converted, i.e. Windows Forms, Classic WebForms, WPF applications, etc., but the initial offerings within the scope of this project will only include conversion of Silverlight/XAML and Console apps. This will include a TypeScript based engine to replace System.Console as well as the Silverlight XAML composition and rendering engine. The technology will allow continued support in C# by enabling browser debugger support for C# code (.cs files) through the use of source maps.

# Rough Order Magnitude

|  |  |
| --- | --- |
| Hours Low | 4000 |
| Hours High | 5000 |
| Weeks Low | 100 |
| Weeks High | 125 |

# Required Documents

\* milestone

|  |  |  |  |
| --- | --- | --- | --- |
| **Document** | | Required (Check for yes) | Minimum  Hours / No Later Than |
| **010\_Business Model (BM)** | |  |  |
| 1 | Executive Summary | X | 2 |
| 2 | Business Model Diagram \* | X | 4 |
| 3 | Roles and Responsibilities \* | X | 8 |
| **020\_Statement of Work Template (SOW)** | |  |  |
| 1 | Executive Summary | X | 2 |
| 2 | Project Background | X | 2 |
| 3 | Project Definition | X | 1 |
| 3.1 | Goals/Objectives \* | X | 4 |
| 3.2 | Cost/Benefit Assessment |  |  |
| 3.3 | Scope | X | 1 |
| 3.4 | Scope Exclusions | X | 1 |
| 3.5 | Approach | X | 1 |
| 3.6 | Deliverables | X | 1 |
| 3.7 | Constraints | X | 1 |
| 3.8 | Dependencies/Interfaces | X | 1 |
| 3.9 | Assumptions \* | X | 1 |
| 4 | Project Organization |  |  |
| 4.1 | Project Organization Chart | X | 1 |
| 4.2 | Estimated Work Effort | X | 1 |
| 4.3 | Resource Requirements | X | .5 |
| 4.4 | Roles & Responsibilities | X | 1 |
| 5 | Project Controls |  |  |
| 5.1 | Project Success | X | 1 |
| 5.2 | Risk Management Plan | X | 1 |
| 5.3 | Issue Management | X | 1 |
| 5.4 | Change Control | X | 1 |
| 5.5 | Communication Plan \* | X | 1 |
| **030\_Business Requirements Template (BR)** | |  |  |
| 1 | Introduction | X | .5 |
| 1.1 | Project Background | X | .5 |
| 1.2 | Goals and Objectives | X | .5 |
| 1.3 | Benefits Assessment |  |  |
| 1.4 | Assumptions |  |  |
| 1.5 | Constraints |  |  |
| 1.6 | Business Requester \* |  |  |
| 2 | Current Business Environment (As-Is) | X | 2 |
| 2.1 | Problem / Opportunity Statement | X | 1 |
| 2.2 | Business Process Map (As-Is) | X | 4 |
| 3 | Proposed Business Environment (To-Be) | X | 2 |
| 3.1 | Business Process Definition | X | 1 |
| 3.2 | Business Process Map (To-Be) \* | X | 4 |
| 3.3 | Customer / End-User Groups |  |  |
| 3.4 | User Experience |  |  |
| 3.4.1 | Reliability |  |  |
| 3.4.2 | Performance |  |  |
| 3.5 | Ease of Use \* |  |  |
| 3.6 | Use Case Detail \* | X | 6 |
| 3.7 | Use Case Requirements \* | X | 18 |
| 4 | External Interfaces |  |  |
| 5 | Solution Constraints |  |  |
| 5.1 | Timing/Performance Constraints |  |  |
| 5.2 | Behavioral Constraints |  |  |
| 5.3 | Security Constraints |  |  |
| 5.4 | Transition Constraints |  |  |
| 5.5 | Schedule Constraints |  |  |
| 5.6 | Implementation/Deployment Constraints |  |  |
| 5.7 | Tactical Decisions |  |  |
| 6 | Risk |  |  |
| 6.1 | Project Risks |  |  |
| 6.2 | Business Risks |  |  |
| 7 | Open Issues |  |  |
| 8 | Future Opportunities |  |  |
| 9 | Glossary \* |  |  |
| **040\_Functional Specification Template (FS)** | |  |  |
| 1 | Introduction | X | 1 |
| 2 | Functional Map \* | X | 8 |
| 3 | Business Use Cases | X | 8 |
| 3.1 | Business Use Case Summary \* | X | 12 |
| 3.1.1 | <Business Use-case 1: Name> | X | 16 |
| 3.1.2 | <Business Use-case 2: Name> \* |  |  |
| 4 | System Requirements | X | 4 |
| 4.1 | Security |  |  |
| 4.1.1 | Menu Item Access |  |  |
| 4.1.2 | Function Access |  |  |
| 4.2 | Interfaces |  |  |
| 4.3 | Integration |  |  |
| 4.4 | Supportability |  |  |
| 4.5 | Maintainability |  |  |
| 4.6 | Availability |  |  |
| 4.7 | Feature Cuts & Unsupported Scenarios \* |  |  |
| **050\_Design Specification Template (DS)** | |  |  |
| 1 | Introduction |  |  |
| 1.1 | Related Documents |  |  |
| 2 | Environment |  |  |
| 3 | Architecture | X | 4 |
| 3.1 | Presentation Tier |  |  |
| 3.2 | Code Behind Tier |  |  |
| 3.3 | Business Object Tier |  |  |
| 3.4 | Data Access Tier |  |  |
| 3.5 | Database Tier |  |  |
| 4 | Security |  |  |
| 4.1 | Roles |  |  |
| 4.2 | Functions |  |  |
| 4.3 | Function Access |  |  |
| 5 | Application Overview |  |  |
| 5.1.1 | Application Components Overview |  |  |
| 6 | Software Detail Design |  |  |
| 6.1 | Work Breakdown Structure | X | 24 |
| 6.2 | WBS Dictionary | X | 40 |
| 6.2.1 | [Repeat for each lowest level WBS work package in diagram above] |  |  |
| 6.3 | Project Network Diagram |  |  |
| 6.3.1 | Program Component A |  |  |
| 6.3.2 | Implementation Elements Overview |  |  |
| 6.3.3 | Object Flow Diagram |  |  |
| 6.3.4 | Event Flow Diagram |  |  |
| 6.3.5 | Additional Diagrams |  |  |
| 6.3.6 | Design Assumptions |  |  |
| 6.3.7 | Component Design Specifications |  |  |
| 6.4 | Mainframe Modification A |  |  |
| 6.4.1 | Implementation Elements Overview |  |  |
| 6.4.2 | Screen Flow Diagram |  |  |
| 6.4.3 | Batch Processing Flow Diagram |  |  |
| 6.4.4 | Additional Diagrams |  |  |
| 6.4.5 | Design Assumptions |  |  |
| 6.4.6 | Project Design Specifications |  |  |
| 7 | Database Design (Web or Mainframe) | X | 20 |
| 7.1 | Table, and Field Identification with Description (per Table) |  |  |
| 7.1.1 | Table/Field 1 |  |  |
| 7.1.2 | Table/Field 2 |  |  |
| 7.1.3 | Table/Field 3 |  |  |
| 7.2 | Database Schema/Table Layout |  |  |
| 7.2.1 | Table 1 |  |  |
| 7.2.2 | Table 2 |  |  |
| 7.2.3 | Table X |  |  |
| 7.3 | Database Transaction Descriptions |  |  |
| 7.3.1 | Transaction 1 |  |  |
| 7.3.2 | Transaction 2 |  |  |
| 7.3.3 | Transaction X |  |  |
| 8 | Error Processing Design |  |  |
| 8.1 | Sources and Categories of Errors |  |  |
| 8.2 | Error Detection |  |  |
| 8.3 | Error Processing |  |  |
| 9 | Testing |  |  |
| 9.1 | Unit Test Plan |  |  |
| 9.2 | Integration Test Plan |  |  |
| 9.3 | System Test Plan |  |  |
| **060\_Test Plan Template (TP)** | |  |  |
| **061\_Test\_Cases\_and\_Results** | |  |  |
| **070\_User Reference Guide Template (UG)** | |  |  |
| **080\_User Acceptance Test (UAT)** | | X | 4 |