



I-Voting Pilot (as “Sample MVC” WordPress Plugin) & MVP App (as Envato Market Item)

Project Plan

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**Kęstutis
Matuliauskas**

info@digitaldemocracy.io
DigitalDemocracy.io

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1 Summary, Goals, Objectives

1.1 Project Summary

Start date: Oct 10, 2018

Pilot ship date (W.org “SampleMVC” pilot): Nov 21, 2018

Commercial release date (Envato product): April 1, 2020

Project duration: 1 month (till pilot release)

1,5 years (till commercial release)

Technologies: Project will be create use PHP programming language (version 7.1), MySQL / MariaDB Database, WordPress CMS, that work well as REST API and Development & Testing framework as well.

For testing will be used PHPUnit 6.4, Windows 10, and PHP Storm IDE with PHP7 Zend Engine CodeCoverage support.

For debugging will be used XAMPP for Win 10 with Php 7.1, and XDebug 2.5.4 (that supports PHP 7.1)

For visuals SCSS won't be used. Instead of that CSS4-Variables will be used that is working much easier, supported by all major browsers (86+% market share). Problematic is only IE11 (3,5% market share). Hopefully either MS will release the IE11 update for CSS4-Variables, as it is still officially supported browser, or it's use will drop below 1% in the world by April 1, 2020, or IE11 users will still see one theme (theming for them won't work).

Project management tools:

1. While project small:

PHP In-code “//TODO” notes, great code documentation

PHPUnit test cases for most important methods of Models, as well as front-end JS testing.

MS Word To-do / To-Fix / To-Test / For-Next-Release DOCX files and PDF exports to partners. For file sharing – MS Outlook E-mails and Dropbox. For source control and project settings: GitHub.com + GitHub for Windows + PHPStorm IDE with GitHub support.

2. When project get bigger (more than 10 people directly involved into project development, and 3 or more developers will be committing to GitHub):

JetBrains YouTrack (<https://www.jetbrains.com/youtrack/?fromMenu>) – JIRA alternative, a great tool for PHP developers that use PHPStorm IDE.

3. If project will become even more big (more than 50 people involved and 10 or more developers will be committing to GitHub):

If we will ever reach this phase, then by that moment will already know the tools and technologies we need to use and we will be using it. It will mostly depend on what JetBrains has to offer, if that fit Windows well (not just Mac) and how good our team members know the desired technologies. Until then we won't waste your time, money and other resources to think about this stage tools.

The main approach to avoid “technical debt” is to hire, or invite to board only those people that are really skilled, and pay them well for their job in money and shares. That will help us to avoid many other risks when project will scale.

1.2 Project Goals & Business Objectives

Prolog:

SampleMVC is based on PHP OOP MVC+Templating architectural implementation, created by Kestutis Matuliauskas, that is based on know-how MVC leaders in PHP written articles regarding possible MVC implementation in PHP. That architectural decision was used for other project, and it appears to be a stable and valid enable. The SampleMVC open-source release still will need in backend to move to use PHP7.1, instead of PHP 5.4, and learn PHPUnit +CodeCoverage + XDebug via PHPStorm IDE on Windows 10 without any virtual machine or shell implementation. On the front-end testing it will required to learn QUnit testing (creators of jQuery + official tool used in WordPress), Silex.JS for QUnit (for fake server support in Ajax queries, fake timer, and Javascript alert content reading inline via JS without popups).

This is needed because “SampleMVC” will need to have his quick-starter “SampleMVC_Tests” plugin as well, that can work immediately.

Pilot goals:

SampleMVC pilot with Vote ability for registered WP Users + Validation / Notifications via SMS (almost all countries via Twilio.com) + Separation of Vote from Voter via separated DB tables. SampleMVC will be released under MIT license, that, differently to GPLv3, does all both – non-commercial and commercial use of given code, that means that they will be able to create commercial products on given architectural pattern code.

Commercial release goals:

Based on SampleMVC with Voter / Vote / Poll example and Twilio.com SMS validation, implement higher quality product, price it for 35 USD / sale. Commercial product, at least must have a great design, and its own settings dashboard, as well as logs system.

2 Scope Statement

2.1 Project Acceptance Criteria

As long as it will not be breaking in 5 days after last beta release, it will be OK to do an official release. Beta testers' call will be public on Envato (for commercial product) and WordPress.org (for Open-Source pilot).

3 Stages and Schedule

3.1 Stages

Stage	End Date
I - PILOT	Oct 17, 2018
II – AFTER PILOT	Oct 1, 2019
III – COMMERCIAL	May 1, 2020
IV – AFTER COMERCIAL	Jan 1, 2021

3.2 Schedule

Stage	Step	End Date
I	1. PILOT - Minimal project planning	Oct 17, 2018
	2. PILOT - SampleMVC plugin adoption from existing sources	Nov 13, 2018
	3. PILOT – “SampleMVC Tests” plugin creation	Nov 13, 2018 (linked with I-2)
	4. PILOT – SE Architecture & Design Course defence preparation	Nov 14, 2018
	5. PILOT – Debugging & Beta releases	Nov 19, 2018
	6. PILOT - Official release (preparing package publishing to w.org site)	Nov 21, 2018
II	7. AFTER-PILOT – Support, Feedback collection, patches & new features	Oct 1, 2019
III	1. COMMERCIAL - Average project planning	Nov 1, 2019
	2. COMMERCIAL – “Internet Voting” plugin creating based on “SampleMVC” plugin adoption	March 1, 2020
	3. COMMERCIAL – “Internet Voting Tests” plugin creation	March 1, 2020 (linked with II-2)
	4. COMMERCIAL – Debugging & Beta releases	March 20, 2020
	5. COMMERCIAL - Official release (preparing package publishing to w.org site)	April 1, 2020
	6. COMMERCIAL – University Master Defence on Internet Voting	May 1, 2020
IV	1. AFTER-COMMERICAL – Support, Feedback collection, patches & new features	Jan 1, 2021

4 Project Budget (Slide Ref. #2-110)

Side note: System Project, Requirements Analysis and similar planning tasks are either included into development itself, as the planning happens at least once per week for each model, or these tasks are not coverable by budget – are not fundable, and happens on good will – and well paid developers do that most of the time. Also the good will comes from community itself – from both places – W.org comments by open-source users, and from University (lectors and other students) that are seeing presentations of this project.

4.1 From Idea to “SampleMVC” Open-Source PILOT plugin in W.org:

150-200 hours to develop. Price ratio – 40 USD / hour. Total price to develop and release PILOT – 6k – 8k USD. As the developer will be CEO itself, it won't need financial budget, but it will need time of CEO that is worth that amount.

Expenses	SUM (USD)	Fully coverable internally
Specialist hours (150-200 hrs @ 40 USD)	6k – 8k USD	Yes

4.2 From PILOT to Commercial release on Envato:

From 500 to 1000 hours to develop. That comes to 20k – 40k USD total price to develop the commercial product.

Minimum outsourcing needs will cost 1000 USD – for design and project assets (logos, commercial images, icons etc.).

Minimum marketing needs will be 1000 USD for period of 2 month from release date.

3rd party purchases – additional scripts, licenses etc. – 400 USD

Total price comes to 22,4k – 42,4k.

Expenses	SUM (USD)	Fully coverable internally
Specialist hours (500-1000 hrs @ 40 USD)	20k – 40k USD	Yes
Minimum outsourcing needs	1000 USD	No
Minimum marketing needs (for 2 month campaign after release)	1000 USD	No
3 rd party purchases – additional scripts, licenses etc.	400 USD	No
Total:	22,4k – 42,4k USD	

5 Resource Breakdown Structure

5.1 From Idea to “SampleMVC” Open-Source PILOT plugin in W.org:

All projects here are pretty much notes / drawings with “|..” like chars in MS Word Document.

Step	Description	Rate
1.	Selection	
1.1.	Co-workers / partners training (NOT FOR PILOT)	0 hr.
2.	System Requirements	
2.1.	Requirement making	10 hr.
2.2.	Analysis	10 hr.
3.	System Project	
3.1.	Hi-level project	10 hr.
3.2.	Project splitting to components	
3.2.A.	Objects project	
3.2.A.1	Voting module project	10 hr.
3.2.A.2	Login / SMS validation modules project	10 hr.
3.2.A.3	Demo website project	10 hr.
3.2.A.4	Other modules projects	10 hr.
3.2.B.	UI & UX interactions project	10 hr.
3.2.C.	Database project	10 hr.
3.3.	Project review and validation	1 hr.
4.	Development	
4.1.A.	System Development	
4.1.A.1.	Voting module	50 hr.
4.1.A.2.	Login / SMS validation modules	50 hr.
4.1.A.3.	Demo website	20 hr.
4.1.A.4.	Other modules development	10-50 hr.
4.1.A.5.	Integration testing	10 hr.
5.	Release	
5.A.	Publishing in W.org	20 hr.
5.B.	Support team training (NOT FOR PILOT)	0 hr.
	Total	251-291 hr.

5.2 From PILOT to Commercial release on Envato:

All projects here are pretty much notes / drawings with “|..” like chars in MS Word Document.

Step	Description	Rate
1.	Selection	
1.1.	Co-workers / partners training	20 hr.
2.	System Requirements	
2.1.	Requirement making	20 hr.
2.2.	Analysis	20 hr.
3.	System Project	
3.1.	Hi-level project	20 hr.
3.2.	Project splitting to components	
3.2.A.	Objects project	
3.2.A.1	Voting module project	50 hr.
3.2.A.2	Sign / Validation modules project	50 hr.
3.2.A.3	Demo website project	50 hr.
3.2.A.4	Other modules projects	50 hr.
3.2.B.	UI & UX interactions project	50 hr.
3.2.C.	Database project	50 hr.
4.	Development	
4.1.A.	System Development	
4.1.A.1.	Voting module	200-300 hr.
4.1.A.2.	Sign / Validation modules	200-350 hr.
4.1.A.3.	Demo website	50 hr.
4.1.A.4.	Other modules development	200-300 hr.
4.1.A.5.	Integration testing	10 hr.
5.	Release	
5.A.	Publishing in Envato	50 hr.
5.B.	Support team training	10 hr.
6.	Finish	
6.1.	Master Defense in VU	10 hr.
	Total	1110-1460 hr.

6 Communication management

6.1 Stakeholders

Stakeholder	Support to project	Relationship with project manager = CEO	Power to other stakeholders
SE Architecture & Design Lector	+ (Course task for Lab 1)	+	Small
Ma.tt & the W.org board	+	+	Average
Free customers (W.org pilot)	+	+	Small
Paid customers (Envato MVP Item)	+	+	Average
LT government	+	+	Small

6.2 Communication plan

Communication with Stakeholder	Communication channel	How often
SE Architecture & Design Lector	E-mail	2-3 times / week
Ma.tt & the W.org board	E-mail, W.org Trac	1-10 times / month
Free customers (W.org pilot)	W.org support forum (Q&A)	1-2 times / month
Paid customers (Envato MVP Item)	E-mail & Envato comments (support Q&A)	1-5 times / day
LT government	E-mail, meetings	3-5 times / year

7 Risk Register

Side note: We avoid here pointless complexity of H / VH etc. (for Probability & Impact), R1, and other complexity to K.I.S.S. And use only two Impact Scope – “Critical” and “For next release” (meaning that we nobody will die if we will move this feature for next release)

7.1 External risks

Possible Causes	Risk	Probability (%)	Impact to Time / Impact to Cost	Impact Scope & Effect	Response Action
<i>Undisclosable</i>	1. Risks, that we cannot publicly disclose (related to commercial-secret)	30 %	<i>Undisclosable</i>	<i>Undisclosable</i>	<i>Undisclosable</i>
Design is late by sub-contractor	2. Design may be late	30 %	1 month 500 USD	For next release (Profit loss – 20%)	If design is late more than 1 month, it will be moved to next release, and default theme will be used as design for demo

7.2 Internal risks

Possible Causes	Risk	Probability (%)	Impact to Time / Impact to Cost	Impact Scope & Effect	Response Action
Lead developer got sick / over-burn	1. Over-coding	30	2-3 month 4k-6k USD	Critical (Project will be late)	Wait
Lack of domain-knowledge	2. Late to deliver SampleMVC	30	1-3 weeks <1k USD	Critical (Project will be late)	Wait
Technology not yet developed	3. Will need to develop new technology (i.e. PHP WordPress plugin unit testing path for Windows 10)	20	2-4 weeks <1k USD	Critical (Project will be late)	Wait