

Children's Online Gaming Website Project Software Management Plan

Top Tech Gaming Solutions

Richard Abell, Alexander Scheck, William Smith, Kristen Wymer
COSC 617 Advanced Web Development
Professor Rebecca Broadwater
Spring 2019

Table of Contents

1. Definition of Project Objective	3
2. Selected Software Process and Justification	3
3. Schedule	3
4. Work Breakdown Structure (WBS)	5
5. Change Management Plan	6
Roles	6
Tools and Documents	6
Process	7
I. Change Request Submission	7
II. Submission Review	7
III. Plan Development	7
IV. Implementation & Monitoring	8
V. Assessment	8
6. Design	9
Header	9
Logo/Banner/Donate	10
Leaderboard	10
Games Section	10
Advertisement	10
Footer	10
Visual Mockup	11
7. References	12

1. Definition of Project Objective

The objective of this project is to have developed a website providing a free “stimulating” online gaming experience geared towards children under the age of 18 by May 13, 2019.

2. Selected Software Process and Justification

For this project, an Agile software development process will best address the needs of the customer and project. Reasons for this selection are listed in the following bullet points.

- The schedule requires a demonstration halfway through the schedule, which would be incredibly difficult for a waterfall process to accommodate.
- Without having complete, well-defined requirements up front an agile process will best allow frequent engagement between the customer and developers to collaborate and realize the customer’s vision for the end product.
- Early in the schedule the customer and developers will meet to negotiate the prioritization of requirements. An agile process, with short sprints, leads to early and frequent delivery of the most important requirements, components, and features to demonstrate incremental progress towards the end goal of a prototype system.
- If problems are encountered, or if the customer requests a change, an agile process will best allow for the accomodation of those changes with the least amount of impact to schedule as compared to a process like waterfall
- Because agile focuses on the client and end users, and because there will be more frequent contact between those parties and the developers, there is a higher likelihood the prototype will be accepted

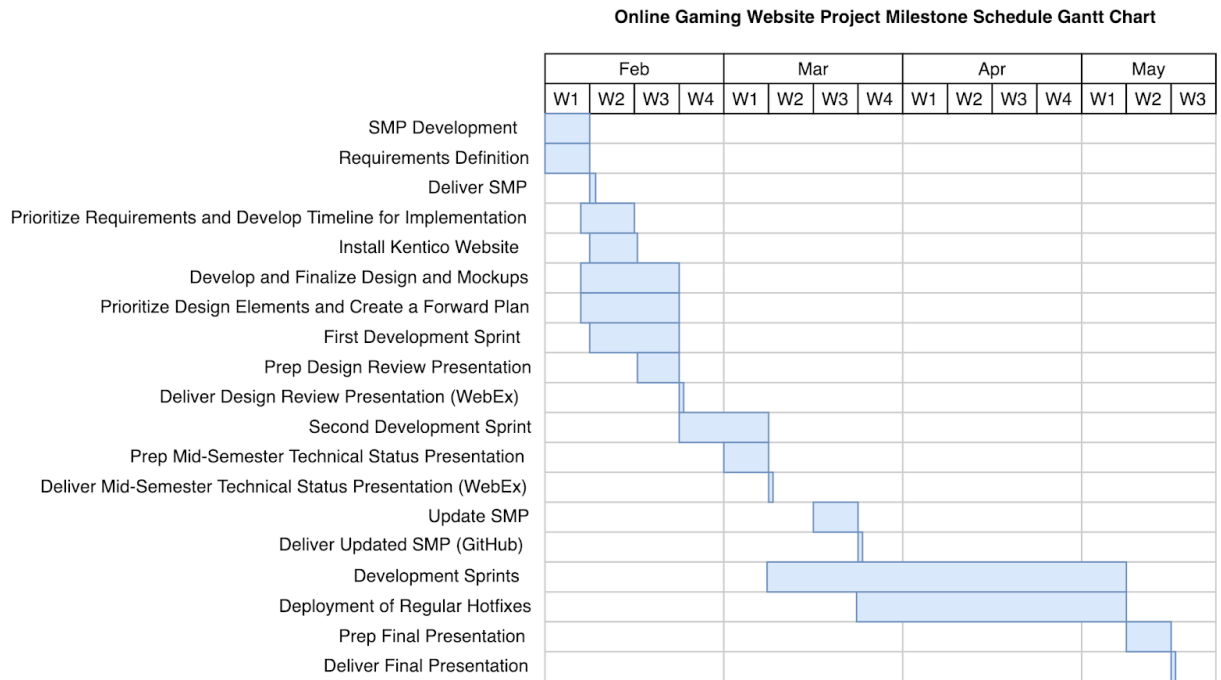
3. Schedule

In order to manage the project for success, Top Tech Gaming Solutions has developed the below initial milestone schedule and will adhere to it as closely as possible.

Milestone Number	Milestone	Start Date	End Date
1	SMP Development	4-Feb-2019	10-Feb-2019
2	Define Requirements	4-Feb-2019	10-Feb-2019
3	Deliver SMP to Customer	10-Feb-2019	11-Feb-2019
4	Prioritize Requirements and Decide on a Timeline for Implementing Them	10-Feb-2019	18-Feb-2019

5	Install Kentico Website	11-Feb-2019	18-Feb-2019
6	Work on and Finalize Design and Mockups	10-Feb-2019	25-Feb-2019
7	Prioritize Design Elements and Create a Forward Plan	10-Feb-2019	25-Feb-2019
8	First Development Sprint	11-Feb-2019	25-Feb-2019
9	Prep Design Review Presentation	18-Feb-2019	25-Feb-2019
10	Deliver Design Review Presentation (WebEx)	25-Feb-2019	25-Feb-2019
11	Second Development Sprint	25-Feb-2019	11-Mar-2019
12	Prep Mid-Semester Technical Status Presentation	4-Mar-2019	11-Mar-2019
13	Deliver Mid-Semester Technical Status Presentation (WebEx)	11-Mar-2019	11-Mar-2019
14	Update SMP	18-Mar-2019	25-Mar-2019
15	Deliver Updated SMP - GitHub	25-Mar-2019	25-Mar-2019
16	Development Sprints	11-Mar-2019	13-May-2019
17	Deployment of Regular Hotfixes	25-Mar-2019	13-May-2019
18	Prep Final Presentation	13-May-2019	20-May-2019
19	Deliver Final Presentation/Demo	20-May-2019	20-May-2019

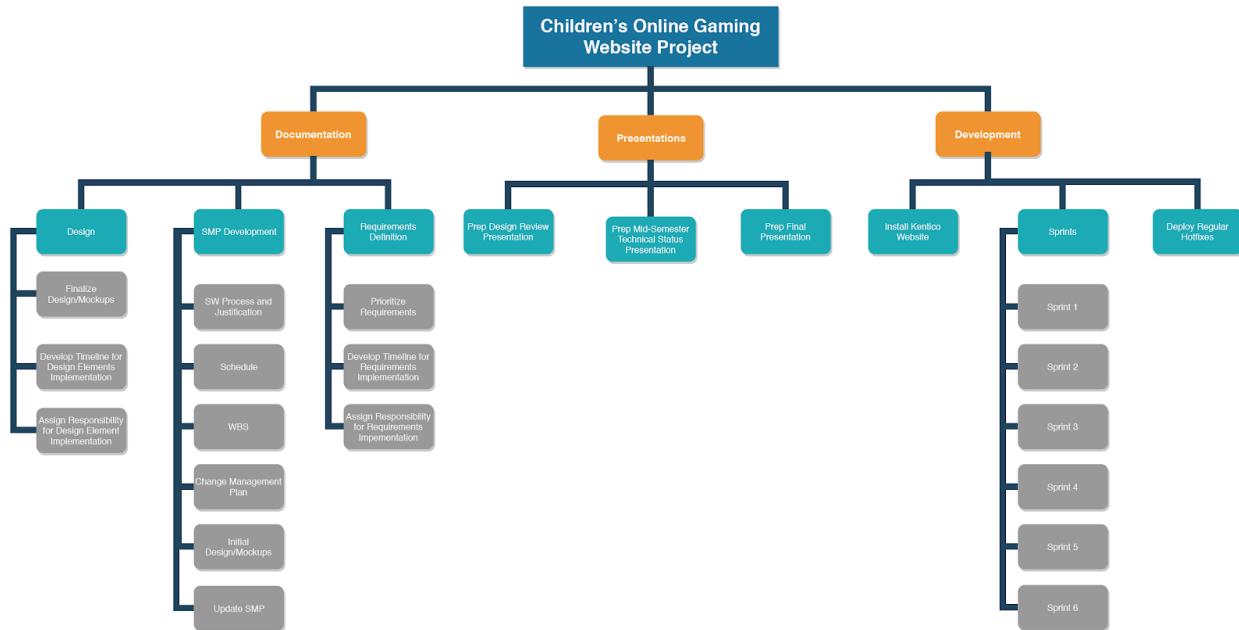
The Agile development model has been elected as is described in section II. Selected Software Process and Justification, therefore it is likely that these milestones will change. Below the anticipated milestone schedule is shown in Gantt chart form.



As stated above, this milestone schedule is Top Tech Gaming Solution's best estimate and is subject to change as the project progresses. An updated WBS (including the updated milestone schedule) will be provided by 25-Mar-2019.

4. Work Breakdown Structure (WBS)

The project has been broken down into the following work packages displayed in diagram format below:



This work breakdown will be adhered to as closely as possible, but is expected to change as the project progresses.

5. Change Management Plan

In order to ensure the quality of the resulting website, it is important to have a process in place to manage and track changes. Having a change management plan in place will allow us to track any proposed changes and assess their impact to the implementation timeline, project cost, effort, and scope.

Roles

Project Manager - ensures that the Change Management Plan is adhered to by the team and mitigates any roadblocks.

Product Owner - works with the client to ensure that client submitted change requests are understood. Involved in scoping and process evaluation and improvement

Developers - implement the approved change. Can submit change request. Involved in scoping, design, and process evaluation and improvement.

Testers - test the implementation of the changed. Can submit change request. Involved in scoping, and process evaluation and improvement

Client - Submits Change Requests.

Tools and Documents

Trello - online task management board that will be used to organize not only changes to be made, but all development tasks related to the project.

Change Request Form - this will be form that will be completed on behalf of the client when they submit a change request. The form will include a description of the desired change, its benefit, and the date requested.

Change Request Log - a spreadsheet containing a list of all change requests that originate both externally (from the client) or internally. Each entry in the log will include the following fields: *Change Request #, Change Name, Description, Requested by, Date of Request, Approval Status, Scope, and Trello task link (url to task in Trello)*. The fields of *Scope* and *Trello task link* will only be filled in if the request is approved.

Process

I. Change Request Submission

- Change requests can be submitted by the client to any member of the team
 - This team member will draft a Change Request Form for the client and work with them to ensure that the desired change and its benefits are understood and outlined.
 - This team member will then add the change request to the Change Request Log and notify the rest of the team.
- Change requests can also be submitted internally by anyone on the team and will then be added directly to the Change Request Log.

II. Submission Review

- Specification Verification
 - Ensure that all stakeholders understand the change requested.
- Cost-Benefit Analysis
 - Performed in order to determine the effect the change will have on scope, time, and cost in.
 - Changes that will have little to no impact can be decided by the technical and test leads.
 - Changes that will impact scope, time, or cost will need to be approved the project manager
- Submission Approval or Rejection
 - When a change request is approved or denied, its status is updated in the Change Request Log and all stakeholders are notified.

III. Plan Development

Once a change request has been approved the following must occur:

- Trello Task Creation
 - A new task must be created on the project board on Trello and placed into holding status. Task should include a descriptive title and a description of the change.
 - The url to the task should be added to the Change Request Log for that entry.

- Determine Design or Method of Implementation
 - If the change is quite involved, the team may need to discuss a method of implementation. Decisions should be added to the task.
 - If the change requires design changes, the team should work with the client to identify preferences and evaluate viability.
- Scope/Effort Estimation
 - The team should come to an agreement on the estimated time it will take to complete the change and add this estimate to the Trello task.
- Generate Test Metrics
 - Metrics must be discussed and decided upon as a way to evaluate the change once implementation is complete. This should be added to the Trello task as well.
- Task Assignment
 - A developer should be assigned to the task.
- Ready the Task
 - The task on Trello should be moved to and “Open” status on the project board, to signify that all planning has been completed and it is ready to be implemented.

IV. Implementation & Monitoring

- Task In Progress
 - Once the task is being worked on the developer will move the task on the project board into the “In Progress” status
- Issues/Questions/Comments
 - Any issues, questions, or comments can be added to Trello task as a way to track them all and ensure that any new decisions made about the task are in a centralized location
- Task in Test Review
 - Once the changes have been implemented the developer should move the task into “Ready to Test” on the project board
 - The tester should evaluate the changes based on the metrics decided upon
 - The task should be moved back to “In Process” should any issues arise
 - If there are no issues, the task should be moved to Done status
- Remedy Any Issues
 - The developer will implement any issues found in testing and then put the task back in Ready for Test when complete.

V. Assessment

- Notify stakeholders
 - All stakeholders for the change should be notified of its completion
- Evaluate Change Management Process
 - The team should assess the Change Management Process and their use of it.
- Modify Change Management Process

- The Change Management Process should be amended should the team find that it could be improved.
- If the team is unsatisfied with its execution of the process, modifications to it can be made to ensure that the same deficiencies are not repeated [1].

6. Design

Header

At the top right corner of the page will include the hyperlinks for 'Sign in', 'Help', and 'Contact'.

- REGISTER/SIGN IN
 - Upon entering the site the first time or after cookies have cleared, the user will be asked to log in or register as a member. The user has the option to close the window and continue to the site but will not be able to access any games until logged in. If the user is not logged in than if a game is clicked the sign in window will appear or the user can click on the 'Sign in' link in the upper right corner. This window will be split into two sections, on the left are the fields username and passwords for users who are already members, clicking the submit button logs the user in. If the user is not a member yet then the right side of the sign in window displays a button to register. Clicking the register button will open the registration window which will consist of a form that will collect user provided information for a username, an email address, a password, date of birth, and captcha code. If the date of birth entered is greater than 18 years of age, the user will then receive extra payment fields to fill out for a subscription. After all information is collected, the user hits submit which creates the user account and profile. Cookies will be collected as to keep the user logged in unless otherwise signed out manually or the cookies are cleared, this way the user does not have to sign in every time they enter the site.
- PROFILE
 - Once logged in, in place of the 'Sign in' link will be the 'Profile' link. Clicking on this link will open a drop down that consist of two links: 'Edit Profile' and 'Sign out'. Clicking on the 'Edit Profile' link will open the users profile page for which they can make edits to their email address, password. Clicking on 'Sign out' signs the user out of the current profile.
- Help
 - Clicking on the 'Help' link opens the help page which consist of a frequently asked questions (FAQ) section. Below will contain a form to ask questions that are not answered in the FAQ.
- Contact
 - Clicking the 'Contact' link opens the contact page which consist of a form to reach out to the company for any information required.

Logo/Banner/Donate

This will contain a large graphic to promote the newest game created or donated. The All Kinds of Games logo will sit in the upper left corner. A Donate graphic/button will display on the right-side center of the graphic. Graphics displayed will have to take these overlays into consideration when being created.

Leaderboard

A ticker will sit under the banner scrolling through the usernames of the top performing users.

Games Section

This section will consist of four game sections: 'Your Games', 'Top Games', 'New Games', and 'All Games'. Each section is laid out the same. The title in the upper left followed by the 'More' link if applied. The section will be a scroller that contains up to 15 game graphics in the shape of a square, if there are more to that section, than clicking the 'More' link will open a page containing all games that apply to that section.

- YOUR GAMES
Consist of games that the player has played
- TOP GAMES
Consist of games that are played most by all users
- NEW GAMES
Consist of games that are recently added to the site
- ALL GAMES
Consist of all games available on the site

Once the user clicks on a game, a new page for that game opens. The game will have a play button that once clicked will start the game. Under the game will be information about the game such as what it is about, play instructions if needed, and credits.

Advertisement

A section for ads will be added between the top games and new games section. Ads can also be displayed at the end of a games section scroller in the form of a square graphic. All ads will display the word ad to notify users.

Footer

Contains a link to 'Privacy Policy' and 'Terms of Use'. Also displays copyright information.



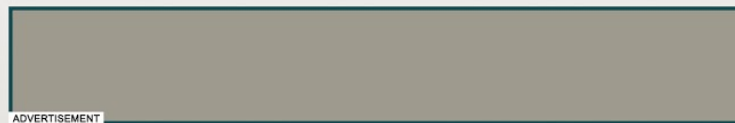
Your Games

[MORE](#)



Top Games

[MORE](#)



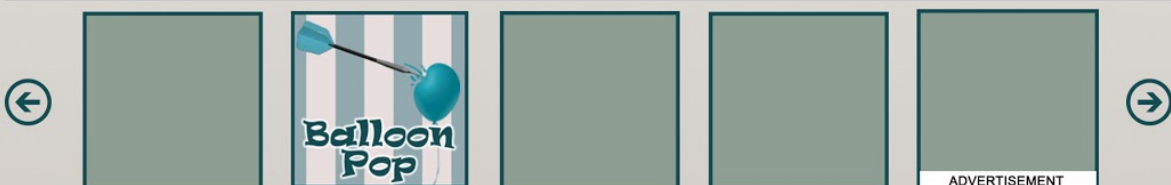
New Games

[MORE](#)



All Games

[MORE](#)



7. Hotfixes

The Kentico CMS developers put out hotfixes on a weekly basis to correct any bugs reported in the previous 7 days. The period of regular hotfix applications starting March 25th as reported in sections 3 and 4 above will entail weekly hotfix application by one of the site developers. The process of applying a hotfix takes the site offline for a few minutes, however, the timing of the hotfix application can be negotiated in order to have the least impact on the user experience. Top Tech Gaming Solutions highly recommends that this weekly patching schedule be adhered to going forward in order to keep the CMS version current and stay on top of any bugs.

8. References

- [1] Stanhop Paterson. "Change Management Project Plan Components Template Governance Ex." [Online]. Available: <https://www.ukashturka.com/change-management-project-plan/change-management-project-plan-components-template-governance-ex/>. [Accessed: 10-Feb-2019].

Top Tech Gaming Solutions RFI Response for Online Gaming Website Software Requirements Specification (SRS)

Top Tech Gaming Solutions

Richard Abell, Alexander Scheck, William Smith, Kristen Wymer
COSC 617 Advanced Web Development
Professor Rebecca Broadwater
Spring 2019

Table of Contents

1. Scope - Online Gaming Website	15
1.1 System Overview	15
2. Requirements	15
2.1 Design and Implementation Constraints	15
2.2 Site Requirements	15

1. Scope - Online Gaming Website

1.1 System Overview

The online gaming website is a philanthropic effort intended to provide stimulating website for children dedicated to managing and promoting online games for children, with the ultimate goal of providing children an enjoyable alternative to “being on the streets...”

2. Requirements

2.1 Design and Implementation Constraints

Top Tech Gaming Solutions will not have any control over the hardware or software versions selected by the end user when accessing the online gaming website. While every effort will be made to design the site to accommodate a wide range of browsers and hardware, the user experience may suffer on outdated hardware and browsers. Likewise, poor network quality may result in an undesirable user experience.

2.2 Site Requirements

The following requirements define the Online Gaming Website

ID	Description	Rationale
1	Must provide age verification to identify those under 18 years of age	Site is targeting free access to children under 18
2	Must include a subscription service adults may use to access the site	Site intends to collect payment from adults to access the site content
2.1	Must accept online payment options such as paypal, credit cards, etc	Site requires a way to accept payment from customers
2.1.1	Online payment acceptance must be secure	Customer payments must be secured to prevent against fraud
2.2	Users will need a way to cancel subscriptions	Need to allow users to stop a subscription

2.3	Users must be able to view subscription status	Users will want to see the details of when their subscription ends, other related information
3	Site will need to provide individual user accounts	Needed for users to be identified when playing games, for activity to be tracked, and for leaders to be shown
3.1	Authentication and user account access must be secure	Must protect the authentication information from unauthorized access
3.2	Child accounts must have a way to be linked to parent accounts so that parents may see what games their children have played	Guardians will need to be able to see the children's activity, and be able to find their children's account(s)
3.3	Parent accounts must support having links to multiple children accounts	Guardians may have multiple children using the site
3.4	Children accounts must support having multiple parent accounts	Children may have more than one guardian who would like to monitor their activities
3.5	Active sessions shall utilize https	User sessions should be protected against unauthorized access of data
3.6	Users need a way to establish an account	First time users will not have an account, so there needs to be a process for them to obtain one
4	Site will record games played by users	Needed to display which games are the most popular, and to display to parents which games their children have played
4.1	Site will display popular games based on number of times played by users	Allows users to discover new, popular games they may not have tried
4.2	Site will display to user the games recently played	Allow user to view same activity that is available for parents
5	Site must accept monetary donations via the online payment acceptance solution	Needed to sustain site operations
6	Site will support the playing of ads	Needed to sustain site operations
6.1	Ads must not "overrun" the site, or detract	Too many ads may interfere with the

	from the user experience in a detrimental manner	user experience and result in users leaving the site
6.2	Site needs to be able to integrate with ad providers such as the Amazon Ad Network, AdMob, etc	This will allow the owner to select an ad provider to generate revenue
6.3	Ads displayed on the site must be age-appropriate for children to view	Because children will be accessing the site, ads need to be "G" rated
7	Site will have the ability to integrate with popular social media platforms	Will allow for users to find other users, sharing of the site experience, and so forth
8	Site will include a centralized leaderboard that displays top scores	Gamers generally enjoy competing for placement on game leaderboards
8.1	Site will need to record game scores for each player per game	Needed to calculate leaderboard
8.2	Site will need to sort and rank the top players based on highest scores per game	Needed to display top performers on leaderboard
9	Include new game with site launch	Requested by site owner
10	Site will provide a process for the donation of actual games to the website	Needed to allow the site to offer additional content and experiences
11	Website will need to render correctly across popular browsers such as Chrome, Firefox, and Edge, prioritized in that order	Because the site cannot control the end user's browser selection, every effort should be made to provide support to the most popular browsers
11.1	Website will need to provide a compelling user experience and render correctly on mobile devices ranging from large tablets such as the iPad to smaller devices such as smartphones	Because the site cannot control the hardware used to access the site, every effort should be made to accommodate a wide range of screen sizes and hardware types
12	Site must display games available for users to play	Users need a way to discover and select games to play
12.1	Upon user selection site shall launch game for the user to play	User would like to play the selected game
13	Site must include contact information for the site operator's customer service/help	Customers will want to know how to contact someone for help with customer service or other issues

14	Site shall be configured in such a way to allow for search engine optimization (SEO)	SEO will make it easier for end users to discover the website
----	--	---