Software Engineering Weekly Deliverable #1

Requirements

Group #4

**1. Educational game covering basic topics**

A game where the kid has to complete a math riddle online, if they complete it correctly then they receive a place that they must go outside and take a picture of the place, if the picture is verified then they receive credit for the problem.

Or use a QR code that when scanned randomly generates a code that they must enter on the website.

Or use a leveling system that as the kid completes math riddles correctly they earn “quest rewards” these rewards could give them coupons to free treats or places in their area.

Incorporate a high scoreboard that the highest students get a free ticket.

**2. Incorporates the state’s amusement park**

Answering enough math riddles correctly will earn free entry to the park.

Include a tab for the given states park that provides information about the park and allows the purchase of tickets.

Park can be chosen via zip code, city, state, or county.

Ads for the given state park can be displayed around the kids game as long as they are age and school appropriate.

**3. Support submission of images, park, descriptions, reviews etc.**

Incorporate a user review that system that will allow the users to review, post images, and descriptions of the park and rides.

For verification use a captcha to prevent spam.

Utilize reviews under the park tab so that the user can review specific rides or the park as a whole.

Utilize reviews under the game itself so that the user can review the game.

**4. Incorporate Online & Mobile Ticketing support**

Include debit card and credit card transactions.

Purchase a ticket through the website with a simple form entry.

Utilize API calls so that the user can pay via PayPal or credit card - No information stored.

**5. Integrate with popular social media platforms.**

If the user reaches an achievement then they can share it on a social media platform.

Allow the user to share the website as a whole.

Social media platforms integrated into the website itself.

**6. Allow parents to view basic info on their child(ren)’s activities in the game**

A parent should be able to view information such as how much they have played what games they have been playing how good they have been doing and how well they are at the math piece

The student can have a unique code on their account and the parent can utilize that code to link to their child’s account. While the teacher can have a teacher code that the student must use to sign up on the website allowing the teacher to have access to all of her students.

\*Does the client want a system that incorporates a hierarchy of “roles” that controls the level of permissions and access that a specific user group has access to? For example a parent role giving a parent access to their child's information for viewing and accessing their child's grades and recent activity. \*

The teacher should be able to see how good their student is doing in the given math problems, and what students potentially need extra help in school practice.

**7. Support Donations**

A button on the webpage for the users to support the website.

They can donate using a web form that calls an API to process the card information

Every week the top donator will receive a spotlight banner to show appreciation for their donation.

**8. All data in a centralized location**

School may want to put the information in their database so store all info in a generalized database

Use a general database to contain all of the codes and student, teacher, parent information.