

Project created on 09.09.2016 00:08.

Report for project Senior Design

Task created on 21.10.2016 01:54.

Design Website

No due date

No description

Task tags: *No tags*

Completed by Carlie Abraham on 21.10.2016 02:01.

➔ **Step 2:** Add Content to Website

Add the following contents to the website: -Client background -Exact need and project scope -Weekly reports (in pdf form) -Contact information -Presentations

Completed by Carlie Abraham on 21.10.2016 01:57.

➔ **Step 1:** Select hosting option

Select a hosting platform that will fit the following specifications: -Easy to build and add content -Free -Allows files to be uploaded and displayed

* **Website Design** Created by Carlie Abraham on 21.10.2016 02:08.

Weebly was chosen as the hosting option because of its ease of use and its ability to perform all of the desired functions. On the front page, background information on our client and our project is displayed. There is a tab at the top to allow the user to view the weekly reports as well as any presentations that have been given throughout the semester. There is additional tabs that contain information about our team and how to contact us.

Here is the link to the website: <http://bmegroup18.weebly.com>

Task created on 21.10.2016 01:54.

Visit Southview School

No due date


No description

Task tags: *No tags*

 Example Book Used In-Class [*sample_books.jpg*]

Uploaded by Tong Yu on 21.10.2016 06:34.



 Song Board Example 2 [*Disney_Songboard.jpg*]

Uploaded by Tong Yu on 21.10.2016 06:35.



 Song Board Example [*song_board.jpg*]

Uploaded by Tong Yu on 21.10.2016 06:33.



 Example of Tool for Communication [*Sensory_Options.jpg*]

Uploaded by Tong Yu on 21.10.2016 06:34.



* Devices and Methods Used in the Classroom

Created by Tong Yu on 21.10.2016 06:28.

Many students use the PCS Symbol system to express their wants and needs to the staff. The buttons used in the classroom are all “cause and effect” types, such as pressing once will turn the page of the story. (PCS system: <http://www.mayer-johnson.com/category/symbols-and-photos>)

The teacher also showed us Zac Browser (<https://zacbrowser.com/>). This is meant for autistic children. There are symbols that lead to different links online, and is used to make the online navigation search more simple and less stressful for the kids. We observed a student play this game on the smartboard with a large switch.

Songboards are currently the most popular leisure activity used in the classroom. There are pages with photo icons, and when clicked, the song or the video plays. This has good social, motor, and cognitive skill aspect because the kids must first raise their hands, and then be able to transition from their seat to the smartboard where it is displayed, and then also tolerate each other’s choices because this is done normally as an in-class group activity. However, this is still difficult to navigate. Content matters are also still limited and are more geared toward younger kids. Furthermore, this can only be done in-class and not individually at home.

* Content Interest and Additional Observations

Created by Tong Yu on 21.10.2016 06:26.

The older kids (ages 18-21) are part of a transition program and attend day programs as well. For younger kids, their school curriculum is academic oriented. However, social skills and practical life skills are more important and crucial to the older kids, and their curriculum focuses less on academics and more on preparing them for life outside the school; the teacher would like us to focus more on these rather than academic skill building.

The teachers want an activity that involves making leisure choices, that can be done individually at home or at school. Independence is very important. Right now, at the school, the student to teacher ratio is 1:1 but after they leave the school and join other assisted homes, it is usually 4:1 and even 8:1 student to staff ratio. Having an option to give the user their own feedback is also preferred (Posing questions such

as “What do you like?” at the end) for better engagement in the activity.

Pairing audio with visual is needed because the sound can indicate to the child that something has happened. Furthermore, reinforcement with sound is preferred over the teacher praising the child. A common problem is that with more verbal praises, the kids stop working independently and they only act when prompted by the teacher, such as when told to touch the page. The kids also prefer the computerized voices over more human voices.

In terms of social skills, the teacher would like the content to focus on how to navigate their community. The older kids struggle with tasks such as understanding stranger danger, stopping at red light, saying “Please” and “Thank you”, respecting personal space, initiating conversation, making eye contact, greeting people, having proper hygiene manner such as not picking their noses in public, and having proper table manner. Currently, the school has a Service Learning Center where the students put together info packets, sort recycling, and deliver mail to offices in the building. The teachers are interested in incorporating volunteer activities like these in the content.

The children are very interested in upbeat music. They also like slapstick humor, such as tripping videos and animal videos, similar to America’s Funniest Home Video. Repetition is favored. For example, one student played the same part of a song story over and over again. The children like stories, as well as Elmo and Barney, but these are not age appropriate.

* Student limitations Created by Yanlin Ho on 21.10.2016 02:28.

The students at Southview School all have many different special needs, but most of them involve behavioral, mental, developmental and physical disabilities. In order to accommodate their behaviors and needs, the teachers have also given us some limitations that we need to work with. There needs to be an option to choose either a muted color scheme or a vibrant color scheme for the layout of the website, as some students respond well to vibrant colors, but others will be triggered by them, resulting in tantrums and behavioral issues. Also, the whole program should as much as possible be simple for the students to access independently, and accessible only with switch controls. The switch only allows for single button presses at a time, so this emphasizes the need for the program to have efficient navigation.

More specifically, the children have attention span of less than 5 minutes. Read-aloud instructions are not helpful because the kids are impulsive and jump right into the activity. They will start pressing buttons immediately. Many of the students cannot fully extend or isolate their fingers, so typing is a huge barrier to accessing contents online. Therefore, a large, palm sized button is preferred. Clicking is easier than dragging for the kids.

Their visual IQ is typically fine. Their hearing is usually fine as well. For example, a student was able to answer a question using her communication device when asked at a normal conversational volume and pace by the teacher. For cognitive levels, some are at pre-K and 1st grade level, and many have high picture support need. However, some of the kids cannot understand pictures, such as clip-arts, because these are abstract. They recognize photographs better. Some cannot count to 5 but can skip count.

* Teacher requests Created by Yanlin Ho on 21.10.2016 02:15.

We met with the teachers at Southview who work with and teach the special needs kids every day. There were two main points that they noticed from the students that affect their teaching. First, the students all tend to have very short attention spans. This means that having efficient navigation in the website is very important. If it takes more than 2-3 clicks to get to an activity from a menu, the students will quickly lose interest, which will then waste the teachers' time trying to get their attention back. Another issue raised by the teachers for the program is that the students like to look for a "close" button, so any button used to close a program should be as hidden away as possible, while still being accessible, as it is very time consuming for a teacher to set up an activity for students, only for the students to turn it off immediately.

Activity of task Visit Southview School

21.10.2016 06:35 *Tong Yu* added file result **Song Board Example 2.**

21.10.2016 06:34 *Tong Yu* added file result **Example Book Used In-Class.**

21.10.2016 06:34 *Tong Yu* added file result **Example of Tool for Communication.**

21.10.2016 06:33 *Tong Yu* added file result **Song Board Example .**

21.10.2016 06:28 *Tong Yu* added text result **Devices and Methods Used in the Classroom.**

21.10.2016 06:27 *Tong Yu* edited text result **Content Interest and Additional Observations .**

21.10.2016 06:26 *Tong Yu* added text result **Content Interest and Additional Observations .**

21.10.2016 06:24 *Tong Yu* edited text result **Student limitations.**

21.10.2016 02:28 *Yanlin Ho* added text result **Student limitations.**

21.10.2016 02:15 *Yanlin Ho* added text result **Teacher requests.**

21.10.2016 01:54 *Carlie Abraham* created task **Visit Southview School.**