With the IEP program, there were a few major features that were outlined to us upon the start of development. These include the ability to search through the students involved in the IEP program, book assessments for exams and provincial assessments, print forms for booked assessments, and finally generate reports for assessments. All of these features were outlined to be done in the 4 months from March to June in our Gantt chart, and can be seen in our "IEP Interview Notes" document on Basecamp. In this document, we will narrow down on what was expected during each month based on the Gantt chart and evaluate our success.

March

The login system was implemented as expected very quickly into the start of development. We set up the SQL database as expected with multiple tables, but by the end of development, we decided to streamline it into one simple SQL table. The file functions.php was made at this point, which is a file that proved to be important for the rest of development as it allowed access to all the database information from any page on the website, as long as functions.php is "required" on the page. The search engine based on first name and last name was also built in March, and checked off as completed on the Basecamp to-do list on March 29th, but as with much of the program, it was improved with more functionality as the semester went on, such as integrating form printing and assessment booking. Back in March, we were originally planning to have separate search engines to just filter out students by accommodation and exceptionality. These were built back in March, but were later scrapped as there is not much purpose to just being able to filter students by accommodation and exceptionality. Instead, on the all students page which was thought of and created later on in the semester, there is an option to filter all students by accommodation. We were originally planning also used to have an earlier version of all students on the homepage, which just dumped out an array of all students with their basic information. This was implemented, but was eventually removed in favour of a separate all students page.

April

The major feature that was started in April was the appointment feature. Our initial idea was to have appointments included as part of student info, so that it would be accessible through the student search. The appointments had ID, date, time, teacher, and room number as the fields originally, all of which were in a separate table, with the ID designating how it should be matched to the information in the other tables. This was functional for a while, but then Dawson changed it so that the ID field was replaced with student name. This probably wasn't necessary, as it makes more sense to match with ID (that would be foolproof since IDs can't repeat unlike student names). Nonetheless, the feature still works, as on the student search the posted name is ran through the php function stristr (rather than strstr to avoid capitalization issues). This feature was meant to be finished by the end of April, but Dawson didn't get around to finishing it until late May, as he checked it off on the Basecamp to-do list on May 17th. The other major feature we planned to have implemented by the end of April was PDF forms. We actually accomplished this halfway through April, two weeks ahead of schedule. It was accomplished using an open source library called FPDF. Upon the click of the generate form button, the

student's info is posted to a separate page where it is saved into a session, and the callback of the JavaScript function opens the page in which the PDF is generated. We were not originally planning to have this feature be so complicated, but using AJAX and JavaScript was necessary, as FPDF cannot generate a form if any PHP or HTML code is outputted to the user. Using sessions was also necessary as opening the PDF page in a separate window could not access the data that was posted, as it was a separate HTTP command. Despite these difficulties, this feature was implemented way ahead of schedule, as I marked it as completed on the Basecamp to-do list on April 13th, allowing for more time developing the rest of the website.

May

The main feature in mind for the month of May was assessments. This was actually started halfway through April, after forms were completed. We originally had separate pages for EQAO planning and OSSLT planning, with each page accessing data from an "assessment" SQL table. That table had fields for assessment name, date, time, room number, and accommodations. Both of these pages were functional for a while, but we decided to streamline assessments into one simple table that allowed for booking of provincial assessments (like EQAO and OSSLT) as well as normal assessments (like math tests, English tests, etc.). With this table, an unlimited amount of students can be booked, and new assessments can be added/deleted whenever necessary, since each assessment is represented by a column in the table. This also allowed us to add a page where the user can view all of the booked assessments and view full info/generate reports. Generating reports also satisfied one of our goals outlined at the beginning of development. It also allowed us to use a common page for all assessments to show all details and booked students, as each assessment uses the same table, unlike our original idea to have separate pages for EQAO and OSSLT. All of this was accomplished right at the end of May, as I marked it as finished on the Basecamp to-do list on May 25th, so we were right on schedule.

Improvements

Despite the fact that we reached all of our major features, including the search engine, assessments, forms, and reports, there are major improvements that could be made to the program. One minor feature that we did not accomplish, which was briefly mentioned in our first meeting with Ms. McKay and can be seen on the "IEP Interview Notes" document on Basecamp was to have teacher functionality. Teachers would be allowed to see all of the students in their own classes involved in the IEP program. Ms. McKay said this was not a priority, but it would have certainly be useful for the program. Its main use would come with the distribution of forms, as the forms have to be distributed to the mailboxes of the homeroom teachers, but this way, the teachers could print the forms themselves and distribute them during class.