## Tyra Oberholzer's Project Step Two

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Throughout my life I have always tried to challenge myself in any way possible. I have always pushed myself and worked hard for everything. This project shall be no different. Being in the Marine Corps has just made my drive to push myself even larger. The project that I have picked is one that most would instruct not to do however if I am to expand my knowledge, I feel that is the best way possible. I understand that I may not be able to complete the exact project I was intending, but the journey of trying to build it will make me stronger.

I will need to gather quite a bit of information to complete my project. It will be a schooling/testing application for homeschooling mothers, fathers, teachers, and children. It will contain information from many different resources. I will need to get the general knowledge and information for each grade of schooling. The general knowledge and information I will be needing are things like the textbooks used for each subject and each grade. I will need the tests from each subject and grade. I do not intend on getting all the information from one source I will be getting it from different schools, books, websites, libraries, and etcetera. Once I have all the information, I will compile all of it together. However, I will separate it from subject and grade.

For the programming side of the application I will need to work on both sides of the application. There will be two different log ins for the application, the teacher login and the student login. On the teacher side of the application they will need to be able to pick which test the student will be taking. Once you sign into the application it will recognize which teacher you are and who your students are. It will have an option for which student you wish to test then it will have the option of which test you would like to give. After the teacher selects the test for the student to take it will automatically push the test to the selected student.

When the student logs in it will automatically populate the test the teacher has pushed. After the student takes the test the application will grade it. The student will be able to look back on to his old tests and grades. They will be able to look back at the questions and answers to study for other tests however they will not be able to copy it. Each student will be generated a different test with different question so there will be no ability to cheat.

If multiple people were to actually end up using this application, I would need to have a large database for all the teachers. Underneath the database for all the teachers would be the students that belong to them. This way it would be easier for homeschooling teachers to keep things organized, to give their students their tests, and to keep a better record of all the students previous tests. This in turn will help turn their work into their homeschooling representative.

I intend for this application to be easy to use for both student and teacher. I know there are applications similar to this out there, and I am sure that they are not too hard to use. However, I want my application to be extremely easy to use so it will take the extra stress off of the teacher's shoulders. I would like to have this as an application for a cell phone and as a web graphical user

interface. The application for the cell phone would be more for the teacher than the student so they can have access to their student's grades and tests at any time with or without a computer. If the teacher does not mind the student taking their test on a cellular device, it will still be compatible for the tests.

The website side of it will first take you to the log in page with the name of the application, of which I am still in the process of deciding what to name it. After logging in as a teacher it will take you to a page with the options I have previously stated. The teachers will have the options of picking the students, grades, or tests however there will also be a select few other options. The teacher will be able to see the resources of where I have gathered my information to create the tests. They will be able to access all of them if they decide they wish to use them for help in their teaching curriculum.

If you were to be the student logging in you would be able to take your tests and look at your grades and answers. They will also be able to see the resources of where I got the information to make the test, but they will not be given the answer documents. If a student wishes to know more information on a question, they got wrong or even a question they got right there will be a link and an explanation for the correct answer of each question.

My plan of action to start this application is how I wrote this report. I will first start by gathering all my needed information to make the tests and to make each test different to not have a chance of cheating. This step here will take quite a bit of time and resources because I wish for the test to be hard, efficient, but most of all accurate. I do not wish for these to just be tests for elementary school and below. I want these tests to be approved for kindergarten through twelfth grade. After I have compiled all my information, I will separate them, and use that information to input into my program. Once the compilation of the information is complete, I will have to start the step of programing it and putting all the pieces together. I am not completely sure of everything I will need for the programming side of it, but with more research and time I will be able to put everything together.

Once all of that is complete and working, I would like to expand the application. I would like to make it for not only test, but for homework and exercises also. Everything nowadays is becoming paperless might as well make it paperless for the homeschooling association too. However, if I get to this point of this application it will not only be for paperless and 'saving the trees'. It will be for the homeschooling mothers and fathers who not only have to try and keep their homeschooling room or more than likely their living room, but also must run a family. I am not saying that a teacher at a school does not have to do both, but they have their own classroom and the resources their school gives them. Homeschooling teachers only have what they can get, which for most is not much. With all of their homework and test's being online if they were to be sick or going away they could still give their students homework or tests without having to be directly in front of them. My hopes for this application are that this will help homeschooling teachers keep things organized, stress free, quicker, and more efficient. I know building this application will push me, and I am excited to continue the process!