Many of the aspects learned during this class will be demonstrated in the final assignment.

Read over the assigned resource in the Reading and Viewing Assignments on the advantages and disadvantages of prototyping. Your final assignment will serve as a prototype of a response system. A response system is a system that requires input from a user or input from another source like a file or database.

Part I: Programming

There are many requests presented in the Bible. For example, Matthew 22:37 states to "love the Lord your God with all your heart, and with all your soul, and with all your mind." Think about some other things that Christians are instructed to do within Scripture.

You will be creating a response system with Biblical requests. Select a different verse than Matthew 22:37 that includes a request made in Scripture. Create (write) a prompt to a potential user making the request from the Bible. Prompt the user to respond. Think of yet another verse that includes a request and present this other request from the Bible. Have the user respond with a different status. Repeat this process one last time with a third request from the Bible and have the user respond with a different status.

Examples: We are requested to "go and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you. And surely I am with you always, to the very end of the age" (Matthew 28:19-20, NIV).

- For this request, I would respond with a number of 3 with areas of concern being:
 - Where do you want me to go to, Lord?
 - Can I baptize or do I have to be ordained?
 - We are requested to "Love the Lord your God with all your heart and with all your soul and with all your mind" (Matthew 22:37, NIV).

(Please use different verses than the verses that have been provided in this example.)

You will be using a flowchart so use the flowchart tool in <u>Visual Paradigm Online</u> as explained in previous sessions. You will also need to write a test plan using the following template. See video for an example.

You are just flowcharting the above requirements and what you would test in your test plan. You will actually be using screen prints to demonstrate your testing for your program. Once you complete your programming tool and your test plan, move on to Part II.

Part II: Programming

First you will need to create a C++ program in Visual Studio that will create a text file. (As in previous sessions, access Visual Studio through the VDI.) Create a C++ program to do the

following:Present a request found in the Bible. You will be using code similar to what you used in session 6. Just modify it to reflect the bible verses instead of areas of concern.

Prompt the user for a number between 1 and 3. This will be similar to the input that was done when you inputted the status in session 6.

If number of 1 is indicated, just place the number 1 in a text file along with the 1st verse you picked from above. Write this to a file called session_10_firstname_lastname_bible1.txt

If a number of 2 is indicated, allow the user to enter bible verses from the Old Testament. Allow the user to enter more than one bible verse write the number 2 and each of the bible verses. This is similar to the status assignment done earlier. in session 6. Write this to a file called session_10_firstname_lastname_bible2.txt

If a status of 3 is indicated, allow the user to enter a bible verses from the New Testament. Write the number 3 and each verse in the text file. Write this to a file called session_10_firstname_lastname_bible3.txt

Completely test your C++ program to ensure it is working accurately. Record your test with screen prints and annotation. These tests will be in one word document. Include annotations with what you are testing.

Add something extra to your program.

Next, create a Java program in NetBeans (access through the VDI) to do the following: Suggestion modify the program created in session 8 to include additional buttons for reading the text files.

- Open the text files created by the C++ program.
- Read all lines in your text file and do the following: Remember you will have 3 files.
- If the number 1 is read, display a message to the screen that everything is okay as well as the scripture verse.
- If the number 2 is read, bring some attention to the message and display all bible verses.
- If the number 3 is read, bring a lot of attention (introduce sound, extra color, or extra emphasis in some way) to the message and display contact information and all the areas which need immediate attention.
- Completely test your Java program to ensure it is working accurately. Make sure to test all functionality.

Test your program with screen prints with annotations. These tests results will be in the same document as your c++ test results which will also include your flow chart and test plan.

Submission Requirements

Include the following in a Word document:

- Your flowchart completed.
- A test plan that has been filled out prior to program execution using the information from the programming tool, and after execution of the program all testing was completed.
- You will also have screen prints with annotations showing execution of both the C++ and Java programs.
- A copy of your C++ program.
- A copy of your Java program.

Your project and program should be titled the following:

- For your C++ visual studio project: session_10_firstname_lastname_bible.
- For your Java program: session_10_firstname_lastname_java_bible.

See the following instructions for how to submit a Visual Studio project or a NetBeans program:

- Saving and Submitting a C++ Visual Studio Projet (pdf) Saving and Submitting a C++ Visual
 Studio Projet (pdf) Alternative Formats
- Exporting and Submitting a NetBeans Program (pdf) Exporting and Submitting a NetBeans Program (pdf) Alternative Formats

Prior to submitting your Word document, title your submission session_10_firstname_lastname_bible.docx.

Click on the Session 10 Final Assignment link and submit your assignment by the posted due date. Review the rubric available