Intern Presentation Script

Hello:

* My name is Nick Gervais.
* I go to college at the University of Minnesota Duluth, I am going into my 3rd year and I am studying Computer Science.
* In the summers I live with my parents in Coon Rapids MN where I also went to High School
* This summer I worked in the IT contact center here at TCF, which is one of Ryan Hawkins teams.
* I also had the pleasure to work on the Project One Chart of Accounts erp team, working on their User Interface.
* My manger was Guillermo Chapellin. And mentor was Jerry Wadell. Both are awesome people!

Contact Center:

* This is where I worked every day! And no I don’t take phone calls, I was apart of the IT development team that supports the contact center. So I did A LOT of coding ☺
* My main project this summer was to create a new IVR Test Tool
* The IVR (Interactive voice response) is the system TCF costumers interact with when they call TCF for help.
* So my I was tasked to create a system to test the IVR system to make sure it is working.
* I worked on this project (we called it NEWTT for New Enterprise Websphere Test Tool) front to back.
* I used the MEAN stack (MongoDB, Express, Angular, and Node.js) to create the front end of the web page. And I used Spring Boot to create the back end. (If you don’t know, front end = what the user sees, back end = all the confusing behind the scenes stuff).
* Why create a new IVR test tool?? Good question! The old ivr test tool was just that.. Really old! So there was many improvements that could be made. Also all of the source code for the old tool had been lost so we needed to make a new one from scratch. Perfect job for the intern right ☺
* Improvements that I made from the old test tool were:
  + A dynamic way to add, edit, and delete services instead of having to code a completely new one.
  + A fully dynamic form builder:
    - The form is where the user will enter in all the information they want to send to the IVR and then they get a response back.
    - I created a dynamic way to build this form by making a soap call to the IVR system using the url the user provides and then grabbing the IVR’s expected result for that specific service.
    - Angular helped a lot with this process by allowing me to use a recursive html component, because the webpage never knows how big or small the expected response will be.
  + Admin and User roles:
    - I added access roles based on the users Active Directory group in TCF’s ldap system.
    - If the user had admin rights, they had access to adding, editing, and deleting services. They also had access to adding, editing, and deleting IVR urls (the urls used to call the IVR system).
* The technologies I used to create this project include:
  + The MEAN Stack which include:
    - MongoDB: a database to store all the information the webpage and users want.
    - Express: an npm package to help route my api.
    - Angular: a javascript framework to help me create the front end.
    - Node.js: to help me set up my back end server.
  + Spring Boot: we later switched the bank end from node.js to Spring Boot.
  + Open Shift / Kubernetes / Docker / Jenkins:
    - These where all used to host our webpage on virtual machines inside TCF.

My Team:

* I got so lucky with being put onto this team. They are all great and taught me so much. They threw me into their team and really made me feel a part of the team by giving me tasks and projects that really matter.
* We had daily stand ups where we all got together in the team space and talked about what we did yesterday, what we are working on today, and what is holding us back. This is part of the Agile Development style which is becoming very popular in most companies.
* We also had a few tech talks where we got together and just talked about technology, best practices and TCF tech standards. It is really cool to talk about the newest tech with a whole bunch of really smart people.
* I can’t thank these guys enough for all they have done for me.
  + Guillermo Chapellin: my Manager.
  + Anshul Soria: the Architect
  + Vincent Sharma: a software developer. Worked on the portal system.
  + Lihe Chen: a senior engineer. Helped me a lot on NEWTT
  + Arun Lakkakula: senior application Engineer. Newer to the team.
  + Jerry Wadell: business analyst and my mentor.

Project One:

* With about a month and a half left of my internship here I got the chance to work on the Project One Chart of Accounts team who are developing a TCF internal webpage to help transfer all of the old documents to the new Oracle system.
* I worked on their User Interface development. Here are some of the things I did:
  + I created a whole new menu layout and dynamic side navigation.
  + I created a template for all mapping modifications.
  + I created a template for all mapping modifications.
* On this project I worked / coded with Angular and Spring Boot, fairly similar to NEWTT.

Paul:

* Paul was the main person I worked with on the Chart of Accounts project. He was the first I met from the team and helped me a lot through the whole thing.
* Even though he is SUPER busy all of the time he still made time to help everyone and answer everyone’s questions which I really appreciated.
* Thank you so much Paul!

What I learned:

* Mean stack like a stated before.
* Agile Development: a form of developing a product that brings developers and clients closer together. This is a really cool why to develop and requires a lot of team communication. So I learned a lot about how to track my work, and how to communicate with others on the team.
* Spring Boot: I learned a lot about spring boot, like spring security, spring sessions, spring restful apis, and java programming.
* Team Work: I did a lot of pair programming with Lihe so I learned a lot about how to work with others in a professional setting. I also had to show others how my code worked and help others complete tasks.
* Docker: this is a container that allows you to run other programs. I used this to run MongoDB, redis and later on NEWTT.
* Networking: Although I struggled with this early on, I eventually started to meet and talk to a lot more people as the summer went on. I realized how important it is to build good relationships and to keep in touch with to those people after you are gone.
* HTML / CSS: This is what I used to do front end on NEWTT and also my presentation web page! I learned a lot about these just after using theme over and over.

Farewell:

* This summer has been the coolest experience ever! I have learned so much more about Computer Science and that fact that I found a career path that I enjoy so much so early on makes me really excited. I also met so many awesome people that I want to stay in touch with.
* Thank you so much to everyone who has helped me and guided me through this journey.