***Career Research Worksheet***

**Software Development and Testing (SDET)**

-        What is this job?

* Participate in Agile Scrum methodology with the team providing input into Analysis and design. planning, and retrospectives
* Collaborate with developers to understand how development changes affect ongoing testing.
* Develop and apply testing processes for new and existing products to meet client needs.
* Design and development of automation framework for web services, API’s, UI, and database.

-        What skills does it require?

* Strong coding skills in Object-Oriented languages (Java, C#, Python).
* Experience with UI Automation using Selenium.
* 2+ years of experience in software quality and test automation development
* Strong interpersonal/communication skills

**Jr. Software Development Engineer (Jr. SDEV)**

-        What is this job?

* Black box testing
* Introduction to object-oriented languages
* Design, research and implement various tools for more efficient testing.
* Collaborate with other QA members to develop best practices for software quality assurance.

-        What skills does it require?

* Strong understanding of QA processes and concepts including test case preparation.
* Quick learner with a passion for testing and becoming a domain expert.
* Strong SQL and database debugging skills
* Strong problem solving and troubleshooting skills.
* Strong interpersonal/communication skills

-        Name some coding languages:

* Java
* C#
* SQL
* Python

**Quality Assurance (QA)**

-        What is manual software and hardware testing?

Manual software and hardware testing refers to the process of testing software or hardware applications manually, without the use of automated tools or scripts. It is when human testers check the quality of a new application or functionality of hardware.

-        What is a bug report?

A bug report is a document that stores all information needed to document, report and fix an issue or defect that occurred in software. It informs the development team about a problem.

-        What is automated testing?

 Automated testing is a software testing technique that uses automated tools and scripts to perform tests on software applications. It is a process that validates if software is functioning appropriately and meeting requirements before it is released into production.

-        What does a QA Engineer do?

* Estimate, prioritize, plan and coordinate testing activities.
* Design, develop and execute automation scripts using open source tools.
* Identify, record, document thoroughly and track bugs.
* Monitor debugging process results.

-        How is a QA Engineer different from a Manual Software/Hardware tester?

 QA is more focused on managing the product life cycle and verifying that the software meets the defined quality standards or customer agreement while Testing, on the other hand, may keep an eye on the processes and often owns them, but is far more concerned with finding ways to break the software.

**Data Analytics**

-        What is this job?

* Analyze data via Excel.
* Build tables, create forms and queries via Access.
* Produce and construct SQL queries.

-        What skills does it require?

* Strong practical ability to manipulate and analyze large and complex datasets (using SQL,R).
* Proven ability to understand business questions.
* Experience of analyzing complex data and interpreting outputs appropriately
* Excellent team working skills, with the ability to collaborate in multi-functional teams.

-        What is the difference between a Data Analyst and an entry level Data Admin role?

Database analysts design, develop and administer data management solutions using database management software. Data administrators develop and implement data administration policy, standards and models.

**Program Management (PM) and Business Support**

-        What is this job? What does a PM do?

* Business document creation.
* Analyze data via Excel.
* Manage outlook tools and commands.
* Business writing, researching, leading meetings.

-        What skills does it require?

* Excel skills
* Writing and speaking skill
* Planning skill

-        What is the difference between a Project Coordinator and a Project Manager?

**Project coordinators guide other team members, but the project manager is fully responsible for the project's success**. Project managers hold a more senior position and may collaborate with several project coordinators.

\*\*Pick a job from the ones listed above (which one are you most interested in?) and use bullet points to answer the following:

* What is the job you are most interested in?
* Data Analytics
* Cloud Computing
* Program Manager
* What courses and skills from YU will support you in obtaining that job?
* Develop my communication.
* Learning basic programing course.
* Help in being professional.
* What additional study, experience, school, training etc will you need after YU L&D to be qualified for that job?
* Learning additional skills like Advanced Excel, Tableau and online courses to develop my knowledge.
* Working hard toward my goal.