Exit Ticket: Oh, The places you'll go!

1. I chose the   career because

2. SELF:

a) Of the skills, abilities, and personality traits listed, which do you think is your strongest?

b) Are you willing to put in the time and energy to earn the education required?

3. SECURITY:

   Do you think the salary range will allow you to live the lifestyle you desire? Explain.

4. SOCIETY:

   How do you think the career you chose fits into society? Does it have the potential to help people? To add something good to the world? Share your thoughts. There are no wrong answers!

Take a Stand: Software Developer and Systems Software Careers

Read each statement below about systems software development careers and then indicate on the continuum how important the statement is to you by selecting the preferable spot on the line.

For example, if you LOVE being detail oriented, you would select a spot close to Very Important end of the line. Think of it as a 0-100 space where you can fill in all of the quantities in between.

SELF

1. Systems software developers have to constantly modify operating systems to update them for the newest computer or cell phone hardware.

   I like being detail oriented, using logic, and solving problems to make things that already exist better.

   Not important   Very important

2. Software developers specializing in systems-level software use lots of science and math in their jobs to make sure that the things they design are optimized or the best they can be.

   I like designing and developing things using science and math to make predictions and solve problems.

   Not important   Very important

SECURITY

3. **Systems software developers typically live and work near big cities, but some software developers work remotely from their homes, which can be anywhere as long as they have internet access.**

   I like the idea of living near a big city, but it also might be nice to work all over the country.

   Not important   Very important

4. **The median salary for software developers who specialize in systems-level software is $107,600.**

   A median pay of $107,600 would offer me the lifestyle I want.

   Not important   Very important

5. **Seventy percent of application developers have a 4-year degree and another 17% have a master's degree. Only 4% have a 2-year associate's degree.**

   I would like to attend 4 years of college after high school and possibly even more.

   Not important   Very important

SOCIETY

6. **Systems software developers create and work on all sorts of systems-level software from operating systems like Windows, MacOS, Android, and iOS to game engines like Unreal and Half-Life.**

    I like working on things that affect lots of people, even though they may not realize it.

Not important   Very important

Take a Stand: Software Developer, Applications

Read each statement below about system software development careers and then indicate on the continuum how important the statement is to you by selecting the preferable spot on the line. For example, if you LOVE being detail oriented, you would select a spot close to the "Very important" end of the line.

One end of the continuum is "very important", the other "Not important"— think of it as a 0-100 space where you can fill in all of the quantities in between.

SELF

1. **Application developers often modify existing software to correct errors or update it for the newest computer or cell phone hardware.**

   I like being detail oriented, using logic, and solving problems to make things that already exist better.

   Not important   Very important

2. **Software developers who specialize in applications use lots of science and math to make sure that the things they make will work.**

   I like designing and developing things using science and math to make predictions and solve problems.

   Not important   Very important

SECURITY

3. **Application developers typically live and work near big cities, but some software developers work remotely from their house, which can be anywhere as long as they have a good internet connection.**

    I like the idea of living near a big city, but it also might be nice to work all over the country.

    Not important   Very important

4. **The median salary for a software developer who specializes in applications software is $101,790.**

    A median pay of $101,790 would offer me the lifestyle I want.

    Not important   Very important

5. **Eighty percent of application developers have a 4-year degree, and another 16% have a master's degree. Only 3% have a 2-year associate's degree.**

    I would like to attend 4 years of college after high school and possibly even more.

    Not important   Very important

SOCIETY

6. **Application developers create all sorts of applications that bring value into people's lives.**

   I like creating things that add value to peoples' lives by helping them be healthier, eat better, or just feel entertained.

   Not important   Very important

App Notecatcher

After reviewing Pokémon GO and Fabulous: Daily Routine Planner, answer the following questions:

Pokémon GO app

1. Briefly describe the app.

2. What need was this app designed to meet?

3. The audience for this app is

4. What are some of the positive aspects of the app based on the reviews?

   a. _____

   b. _____

   c. _____

5. Is this app interesting to you?

   Yes ☐   No ☐

   Why or why not?

Fabulous: Daily Routine Planner

1. Describe the app.

2. What need was this app designed to meet?

3. The audience for this app is

4. What are some of the positive aspects of the app based on the reviews?

    a.

    b.

    c.

5. Is this app interesting to you?

    Yes ☐   No ☐

    Why or why not?

My choice of an unpopular app is

1. Describe the unpopular app you've chosen.

2. What need was this app designed to meet?

3. The audience for this app is

4. What are some of the negative aspects of the app based on the reviews?

   a.

   b.

   c.

5. Can you think of something that might improve the app?

Design Analysis Graphic Organizer

Criterion	Features Analysis	Reasoning
Intuitive	App Example	For example: It is easy to get started from the first screen.
	App Non-example	For example: It's hard to figure out how to get to some of the features.
Efficient	App Example	For example: The app does what it says it can do.
	App Non-example	For example: It takes forever for the home page to load.

Easy to navigate	App Example	For example: A 2-year old could use this app.
	App Non-example	For example: There is no menu from which to move around in the app.

Take a Stand: Graphic Designer Careers

In today's lesson, we've spent time thinking about what makes apps appealing and easy to use. This means thinking about both form—the way things look and feel—and function—the way things work. We're going to take some time now to explore the career of graphic designer. Graphic designers are digital artists who think a lot about the way things look.

Read each statement below about graphic design careers and then indicate on the continuum how important the statement is to you by selecting the preferable spot on the line. For example, if you LOVE being detail oriented, you would select a spot close to the Very important end of the line.

One end of the continuum is "Very important," the other "Not important"— think of it as a 0-100 space where you can fill in all of the quantities in between.

SELF

1. **Being creative and seeing your ideas come to life are an important part of the work of a graphic designer.**

    I like being creative and seeing my work come to life.

Not important   Very important

2. **Graphic designers need to be very detail oriented!**

   I enjoy thinking about design, style, and details.

   Not important   Very important

3. **Graphic designers often have to work collaboratively with clients to design products.**

   I work well with people.

   Not important   Very important

SECURITY

4. **Graphic designers can work from just about anywhere.**

   I like having the ability to work all over the United States.

   Not important   Very important

5. **The median pay of graphic designers is $52,110.**

   A median pay of $52,110 would offer me the lifestyle I want.

   Not important   Very important

6. **Most graphic designers have a four-year degree.**

   I would like to attend at least 2, but likely 4-years of college after high school.

   Not important   Very important

SOCIETY

7. **Print and digital art made by graphic designers is found everywhere.**

   I like the idea of a career that enriches people's lives.

   Not important   Very important

My App Ideas Notecatcher

What Need Am I Filling?

Choose either #1 or #2 and describe the need(s) your app will be designed to address.

1. What are some needs that you experience as a young person that could be solved by mobile technology? Or think bigger—what are some broader issues in your family, community, or the world that mobile technology could address with a well-crafted app?

   OR

2. What apps do you currently use? What annoys you most about the way these apps function? How would you improve them? How would you personalize them more?

What Is My Concept

Answer the following questions about your app concept:

- What need do you think your app can meet?

- Who are your target users, that is, your audience?

- What will your app actually do? That is, can you name two or three features of your app?

- How will you get paid for your app? Ads? Subscriptions? Purchases through the App and Play Stores? What will your app actually do? That is, can you name two or three features of your app?

Exit Ticket: My Coding Experience

1. I thought programming an app was

   fun   ok   boring

2. I thought using code to build an app was

   easy   kind of hard   difficult

3. The coolest thing about building my own app was

4. The hardest thing about building my own app was

5. I'd like to try more coding!

   Yes   No   Maybe

Usability Testing of Competitor Apps

Name of competitor app	What does it do well?	What could it do better?	How will your app be different?

Usability Testing Questions

Record your answers to these questions as you look at your app objectively to test its usability.

Questions	Features Analysis
Is the app intuitive? • *Is it easy to get started from the first screen?* • *Do I need a lot of practice to use the app?*	**Answers:** **Examples:**
Is the app efficient? • *Is the app useful?* • *Does the app have a good structure?*	**Answers:** **Examples:**
Is the app easy to navigate? • *Is it easy to move around in the app?* • *Do users get confused?* • *How much time does it take to perform functions?*	**Answers:** **Examples:**

Take a Stand: Applying Your Lenses to the Software Quality Assurance Engineers and Testers Career

Read each statement below about system software development careers and then indicate on the continuum how important the statement is to you by selecting the preferable spot on the line. For example, if you LOVE being detail oriented, you would select a spot close to the "Very important" end of the line. Think of it as a 0-100 space where you can fill in all of the quantities in between.

SELF

1. **Software quality assurance engineers and testers find errors in code and make detailed records of it so that other engineers can correct them.**

   I like figuring out how to test things and then testing them to see if I can get them to break.

   Not important   Very important

2. **Software quality assurance engineers and testers have to be meticulous in their testing and record keeping, even when they are testing things like video games!**

   I like being detail oriented, systematic, and very thorough.

   Not important   Very important

SECURITY

3. **Software quality assurance engineers and testers typically live and work near big cities, but some work remotely from their house, which can be anywhere as long as they have internet.**

   I like the idea of living near a big city but it also might be nice to work all over the country.

   Not important   Very important

4. **The median salary for software quality assurance engineers and testers is $85,510.**

   A median pay of $85,510 would offer me the lifestyle I want.

   Not important   Very important

5. **Seventy percent of application developers have a 4-year degree, and another 15% have their master's degree. Only 7% have a 2-year associate's degree.**

   I would like to attend 4 years of college after high school and possibly even more.

   Not important   Very important

SOCIETY

6. **Software Quality Assurance Engineers and Testers are responsible for finding and reporting defects, or bugs, in computer code.**

   I like the idea of a career that enriches people's lives.

   Not important   **Very important**

Take a Stand: Applying Your Lenses to the Marketing Manager Career

Read each statement below about systems software development careers and then indicate on the continuum how important the statement is to you by selecting the preferable spot on the line.

For example, if you LOVE being detail oriented, you would select a spot close to the "Very important" end of the line. Think of it as a 0-100 space where you can fill in all of the quantities in between.

SELF

1. **Being strategic and analytical and trying to predict things before they happen are part of being a marketing manager.**

   I like being strategic and analytical and trying to predict things before they happen.

   Not important   Very important

2. **Marketing managers often have to balance company objectives and customer satisfaction.**

   I work well with all sorts of people.

   Not important   Very important

SECURITY

3. **Marketing managers can work for companies anywhere there is a market.**

   I like having the ability to work all over the world.

   Not important   Very important

4. **The median pay for a marketing manger is $132,230.**

   A median pay of $132,230 would offer me the lifestyle I want.

   Not important   Very important

5. **Fifty-six percent of marketing managers have a 4-year degree and another 24% have their master's degree. Only 11% have a professional degree.**

   I would like to attend at least 2 but likely 4 years of college after high school and possibly even more.

   Not important   Very important

SOCIETY

6. **Marketing managers promote positive messages and public awareness of products and services.**

   I like promoting positive messages about my organization and increasing public awareness about what my company does.

   Not important   Very important

100-Word App Description

Now it's time to write the app store description for your app! Here are some suggestions:

1. *Aim for as close to 100 words as you can.*
2. *Try to address each of the questions below in your description.*
3. *You can use bullet points or phrases to answer each question but strive for full sentences if you can.*
4. *Think about a future user of your app as you write — your goal is to get them to click that Install button and download your app!*

Use these questions to help guide your 100-word description:

- *Why did you create this app?*
- *What is unique about your app?*
- *What need do you think your app is meeting for people?*
- *How does your app meet that need?*
- *Who is your target consumer, and why would they want to use your app?*

Presentation Notes

1. The name of my app is

2. My app is designed for (who is your audience?)

3. In a nutshell, my app (what does your app do?)

4. If I were to keep working on this app, I would want to

    a.

    b.

    c.

Portfolio Reflection: Part II

Select one or two questions in each category below to respond to. You can write in full sentences or use bulleted phrases. Work to show reflection by

- *showing your growth and learning over the course of the unit;*

- *showing something that you are particularly proud of and explaining why you are proud of it; and/or*

- *showing a change in your thinking over the course of the curriculum.*

Information Technology

- *How interested were you in information technology sciences when you began this unit?*

- *What is one thing you learned about yourself during the lessons about information technology sciences?*

- *How did your interest in information technology sciences change over the course of your learning?*

Self

- *What did you learn about your interests?*

- *What skills did you build in your skills bank?*

- *Which skill did you improve? How do you know you improved? Why is the skill important?*

- *What did you find most interesting and engaging? What questions do you still have?*

- *Which of the careers we explored would be a good match for you based on your **SELF** lenses?*

Society

- *What are important challenges or problems in your community that are important to you?*

- *How can you help people as a member of this professional community?*

- *Which of the careers we explored would be a good match for you based on your **SOCIETY** lenses?*

Security

- *What are the next steps you might take to be future ready?*

- *What choices would you need to make it into this field?*

- *What skills are important in this field/career?*

- *Which of the careers we explored would be a good match for you based on your **SECURITY** lenses?*