

# QC Orientation

QC Department



# What is QC?



- QC is Revature's Quality Control process to assess mastery of trained content.
- It is our job to prepare you for client interviews and ensure you are prepared with the skills for your new position
- We also analyze assessment data to report to other internal departments.
- We do this through a number of Assessments:
  - Quality Audits
  - Coding Challenges
  - Quizzes and Exams
  - Project Review

- Quality Audits are an interview-like assessment where we will ask you questions about topics in training
  - Conceptual questions
  - Practical questions (you may be given an example or asked to write code)
- Quality Audits will either be conducted in small groups or on a 1 on 1 basis. **Make sure to have your webcam on.**
- Performance evaluation is based on:
  - Your technical accuracy in answering questions
  - Your ability to effectively communicate (soft skills)
- They will be scheduled after the content for the competency has been covered

- Let's walk through what Quality Audit would look like by showing some examples of good, average, and poor answers
- Read each answer yourself and see if you agree with the sentiment provided below

**Q: "Explain what polymorphism means and how you can use it in Java code?"**

"Ummm.... well it's sort of like how you write something but you can like use it as something else... wait, I may be confusing this with abstraction... no I think I have it right..."

- Notes: (poor)
  - Filler words
  - Too short
  - Extremely vague
  - Trailing off
  - No technical terminology used
  - Unconfident language ("sort of", "like")

**Q: "Explain what polymorphism means and how you can use it in Java code?"**

"I think polymorphism means many forms. I believe in our code we can achieve polymorphism through method overloading or overriding. Overriding is being able to take child class and provide a specific implementation for a method; inheritance means we receive the same fields and methods as the parent class. Private fields are not inherited."

- Notes: (Average)
  - Technically correct, but some information is irrelevant to question
  - Unconfident language ("I think", "I believe")

**Q: "Explain what polymorphism means and how you can use it in Java code?"**

"Polymorphism means many forms. We can use method overloading or overriding to implement it in the code. Overloading means changing the method signature in the same class; overriding means changing the implementation in a subclass"

- Notes: (good)
  - No filler words, hesitations
  - Gave explanations for the terms used

**Q: "Explain what polymorphism means and how you can use it in Java code?"**

"Polymorphism is an object-oriented design principle that means many forms. Most commonly we will use method polymorphism which includes method overloading and overriding. Overloading consists of a method in the same class with the same name but changing the number or type of parameters; overriding refers to inheriting a method and then changing its implementation, so it must be declared with the same method signature. When we use overriding, we can declare a variable as the parent type but instantiate the child and the child's method will be invoked. Also, covariant return types allow us to return a subtype of the parent method's return type when we override a method. For example, in my latest project, I overloaded a method to ... <give concrete example>"

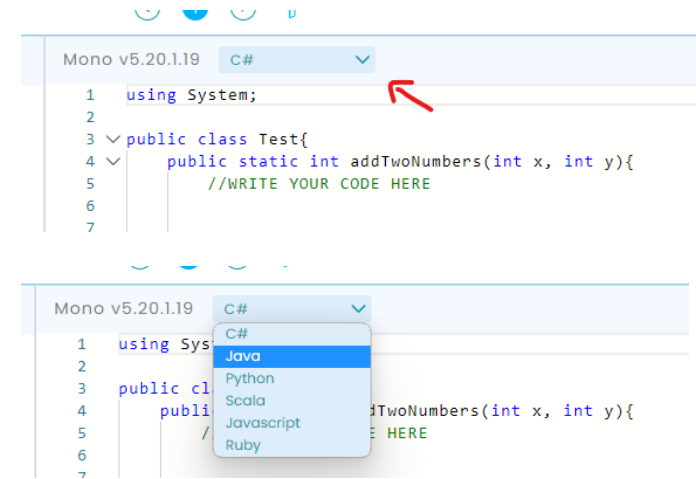
- Notes: (exemplary)
  - Very detailed and succinct
  - Bonus for adding in a real world example



- If you are learning a curricula with a core programming language, you will also be given coding challenges in your core languages:
  - e.g. the first language you learn in your curricula (Java, C#)
  - also SQL if you learn database technologies
- Not all curricula have coding challenges, check with your trainer!
- These will be taken using the iMocha platform through RevaturePro
  - The platform will check for window violations, please do not switch away from the test window after you start
  - Violations will be penalized
- Performance evaluation is based on:
  - your ability to pass 1-5 test cases using the correct programming language
- They will be scheduled:
  - Every week asynchronously, and are open for 3 days

# Coding Challenges - Guidelines

- For coding challenges, if you do the question in the wrong programming language for **any** question, you will receive a 0%.
- If you hard code an answer to only get 1 test passing for each question, you will still fail.
- Set out about 1-1.5 hours to do the coding challenge because once you start it the clock does not stop.
- **Do Not** edit the provided code or else none of the test cases will pass.



```
public static
int exampleMethod(int inputValue) {
//WRITE YOUR CODE HERE

}
//DO NOT TOUCH THE CODE BELOW
```

# Coding Challenges - Guidelines

- Do not click away from the test window - this is counted as a window violation
- The system will record window violations and we will not count your score if this is detected
- Take your time to fully read the prompt and think through your solution
- You will not be allowed to copy/paste any text or code
- If you violate the policy, we will assign an alternate challenge to complete

**Window Violations: 3**

**Time Violation: 1 min 36 sec**



**Window violations detected above 1 min, beyond tolerable limit.**

- There are 2 types of quizzes you will (potentially) take through the RevaturePro platform: [ For TRNG-2009 cohort: they will be assigned with the weekly quizzes which will be used for grading/scoring. No Competency exams for TRNG-2009]
  - Unit quizzes to help you practice mastery of the topics from the previous week (not used for formal grading – just for practice)
  - Competency exams to check your total mastery of a given competency (formally graded)
- Performance evaluation will be based on:
  - Your percentage score
    - The QC team specifically uses the Competency Exam scores for our own internal reporting, so use the unit quizzes to help prepare for those
- Unit quizzes will be scheduled after completing content for that unit; competency exams will be scheduled at the end of the competency

- For specific projects that you complete in training, the QC team will assist your trainer to evaluate them
- Performance evaluation will be based on:
  - Your ability to complete all requirements for the project
  - Your ability to effectively present your work in a presentation style
- Project due dates will be communicated to you from your trainer since every technology track has slightly different project scheduling

- The following are examples of cheating/plagiarism:
  - Quality Audit
    - looking at notes or looking up material while being asked questions
  - Coding Challenge
    - looking up answers for the problem
    - switching away from test window during the challenge
  - Quiz / Exam
    - looking at notes or looking up material during a quiz
  - Project
    - copying someone else's **unique** code without attribution

## How will I get feedback on performance?

- The best place to get overall feedback is from your trainer – feel free to ask for direct feedback
- The QC auditor may give general feedback/advice depending on time constraints
- If you're not told directly you need to improve in your assessments, then you are most likely keeping up to internal metrics we expect

## What happens if I do poorly in an evaluation?

- If you fail one evaluation, you can still improve your scores by doing well on other types of evaluations.
- You will be assessed often, and your overall performance/trend is what matters.
- If you perform poorly on a competency, you will have a chance to be re-evaluated and improve in a cumulative session at the end of training



## How can I better prepare for QC Assessments?

- **Review** all the topics regularly!!!
  - All assessments are based on the RevaturePro curricula that is assigned to you
- **Practice** all the topics (code/say them)
  - Adapt given examples and create your own examples
  - Quiz each other on concepts to keep sharp
- There will be a cumulative QC audit at the end of training covering all topics. We will target the weakest areas so that you can improve on them.
- Practice makes Permanent!

- Be curious - ASK QUESTIONS
  - Especially if you are not sure what to do or when to do it
- Practice, practice, practice
- Learn HOW to Debug
- Coding: Plan first, write second
- Speak with Precision
  - Use technical language
  - Practice saying your answers OUT LOUD!
  - Be picky with yourself and your word choice
- If you can write the code, you should be able to talk about it, and vice versa.
  - The perfect balance towards acing the interview

## Questions and Answers

