**EPIC TestAbility Academy**

**Session Plan 3 - Test Approaches**

**Session Themes**

* More than one way to approach testing
* There are “schools” of software testing
* Compare and contrast the two major “schools”
* Traditional test activities and more recent ones
* White box and black box testing

**Introduction to week 3**

* There are many ways to develop software but two dominant formats
* Compare waterfall and agile

**Session Goals**

By the end of this session we will have covered:

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| **1** | **Welcome & introductions** | **Points to cover**   * Review set homework tasks * Review any uncertainties. Revisit week 2 content as required * Introduction of today’s topic   **Activities**   * A group discussion about findings, difficulties and successes. Was anything really difficult? - Why? Did anything feel really easy? - Why? * Group members, when comfortable, may help provide ideas and suggestions to help solve others problems |
| **2** | **Development Methodologies** | **Points to cover**   * Many ways to develop software. Broad categorisation Waterfall and Agile * This session is largely about Waterfall but the activities in various forms could also be relevant in Agile * Explanation of Waterfall main features   **Activities**   * Discussion of what problems waterfall might present. The challenges it might create for a Tester. |
| **3** | **Schools of testing** | **Points to cover**   * Factory and context driven testing * CDT - what is it and what does it represent? * CDT - the 7 principles   **Activities**   * Question - do either of these appeal to you as an approach you might prefer? Why? * General discussion based on questions from students. |
| **4** | **Static Testing** | **Points to cover**   * Static testing, what is it. * Dynamic testing - how it differs to static testing * Why we static test * What things do we look for when static testing? * Managing and resolving static testing issues * Regardless of development methodology, static testing is valuable.   **Activities**   * An example specification to be examined - report findings |
| **5** | **Test Requirements**  **Test Traceability Matrix** | **Points to cover**   * What are they, why are they documented? * Test requirements - attributes of the software under test (SUT) that we want to test * In most cases drawn directly from specification document (beware, danger lurks here) * Often the emphasis is on proving things rather than disproving them * Often people want them to conform to specific format (eg Ensure that…) * Many companies require these be linked back to business requirements to form a Test Traceability matrix * Business requirements - explain and discuss * Discuss traceability matrix   **Activities**   * Write test requirements based on an example specification |
| **6** | **Test Cases** | **Points to cover**   * What are test cases? * Why create test cases? * How much detail do they require? * What are the ways we can create them? * Compare traditional versus more modern thinking and ways * Can we test without test cases? * Has anyone noticed that we haven’t even seen the SUT yet?   **Activities**   * Using an example specification create test cases that relate to your test requirements. * How might you go about creating these test cases rather than writing them up front? * Discussion - what might be the problems if we write test cases based on the spec and have no access to the software? |
| **7** | **Exploratory Approach** | **Points to cover**  This is an overview as contrast to more traditional approach already discussed   * What is Ad hoc testing * What is a Testing tour * What is Exploratory testing * What is Session Based Test Management (SBTM)   We will come back to these in more depth in future sessions where you can gain some experience. |
| **8** | **White Box and Black Box testing** | **Points to cover**   * Explain white box testing. Why does it have this name? * Explain black box testing. Why does it have this name?   **Activities**   * Discuss any questions on the two concepts. |
| **9** | **Wrapping up** | * Summarize today’s session * We’ll choose a website, exploratory test it (here’s some guidance on the kind of things to look for) |