**EPIC TestAbility Academy**

**Session Plan 2 - Testing Techniques**

**Session Themes**

* Revision of session 1 to help deepen understanding
* Repeat from session 1 as required
* Introduction and practical application of test techniques

**Session Goals**

By the end of this session we will have covered:

|  |  |  |
| --- | --- | --- |
| **1** | **Welcome & revision of week 1** | **Points to cover**   * Review set homework tasks * Review any uncertainties. Revisit week 1 content as required * Introduction of today’s topic - what we mean by a “test technique” * Picking techniques appropriate to context * A technique gives options - testers think about the options and accept or reject   **Activities**   * A group discussion about findings, difficulties and successes. Was anything really difficult? - Why? Did anything feel really easy? - Why? * Group members to say what worked well in the first session, what didn’t work so well, to guide next sessions. * Group members, when comfortable, may help provide ideas and suggestions to help solve others’ problems. |
| **2** | **Boundary Value Analysis (BVA)** | **Points to cover**   * Why we use this technique * How we apply the technique * Remember - the smallest logical increment requirement * Range of input types not required   **Activities**   * Apply BVA to specification examples |
| **3** | **Equivalence Partitioning (EP)** | **Points to cover**   * Why we use this technique * How we apply the technique * Range of input types need to be considered * How EP can combine with BVA to reduce number of tests required   **Activities**   * Apply EP to specification examples * Apply EP and BVA to specification examples |
| **4** | **Decision Trees**  **And**  **Decision Tables** | **Points to cover**   * Why we use them * How they are constructed * How we make decisions about testing from these   **Activities**   * Construct a decision table and decision tree from a specification example * Discussion on usefulness. Which one do you prefer? Why? * What risk do we need to think about when using these? |
| **5** | **All Pairs** | **Points to cover**   * Why we use this technique * How to use All Pairs utility   **Activities**   * Use James Bach’s All Pairs utility to derive all pairs from specification example * Examine the output and determine what has happened. * Discuss the impacts of all pairs on our example * Could all pairs introduce problems (such as additional risk?) |
| **6** | **Wrapping up** | * Summarize today’s session * Choose a Lyndsay machine and test it, using some of the techniques from this session, report back next week |