Boundary Value Analysis (BVA) and Equivalence Class Partitioning (ECP) for Techademy Platform

# 1. Boundary Value Analysis (BVA)

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| Scenario | Input Field | Valid Range | Boundary Values to Test |
| Login – Password Length | Password | 8 to 16 characters | 7 (Invalid), 8, 9, 15, 16, 17 (Invalid) |
| Name field in Profile | Full Name | 2 to 50 characters | 1, 2, 3, 49, 50, 51 |
| Phone Number Entry | Mobile Number | 10 digits | 9 digits (Invalid), 10 digits (Valid), 11 digits (Invalid) |
| Quiz Score Validation | Quiz Marks | 0 to 100 | -1, 0, 1, 99, 100, 101 |
| Feedback Textbox | Feedback Text | 0 to 250 characters | -1, 0, 1, 249, 250, 251 |

# 2. Equivalence Class Partitioning (ECP)

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| --- | --- | --- | --- |
| Scenario | Equivalence Classes | Sample Test Input | Expected Result |
| Login – Password | Valid: 8–16 char Invalid: <8, >16 | password1 (valid), 123 (invalid) | Login success / Login fails |
| Profile – Email | Valid: contains @ and . Invalid: missing @ or . | Xxxxx@email.com, abccccc.com | Accept / Reject |
| Phone Number | Valid: 10-digit numeric Invalid: <10 digits, letters | 9876543210, 98765AB12 | Accept / Reject |
| Quiz Score | Valid: 0–100 Invalid: negative, >100 | 85 (valid), -5 (invalid) | Accept / Reject |
| Feedback Field | Valid: 1–250 characters Invalid: blank, >250 | Great course!, <blank> | Accept / Reject |