

Table 1: Coding Guide

Note: A task should be coded if at least one of the criteria is fulfilled.

| Step | Activities / Criteria |
|---------------------------------------|--|
| S1. Get program information | <ul style="list-style-type: none"> • Gathers information to prepare for testing • Seeks out additional sources of information to understand the program (e.g. specs, documentation, asking an expert) |
| S2. Get expected behavior | <ul style="list-style-type: none"> • Reads program information or source code • Moves cursor between test suite and program code • Runs initial unmodified test suite & reviews results • Asks questions regarding expected behavior |
| S3. Select scenarios to test | <ul style="list-style-type: none"> • Specifies cases to test (verbal or text) • Specifies boundaries/ranges/types to test |
| S4. Update test suite | <ul style="list-style-type: none"> • Adds/removes/edits test cases • Edits input and output values <p>Note: These modifications may be performed automatically by the tool</p> |
| S5. Run test suite | <ul style="list-style-type: none"> • Presses run test button or runs terminal command to test |
| S6. Get observed behavior | <ul style="list-style-type: none"> • Generates results of running PUT against test cases • Reads/scrolls through results |
| S7. Select interesting results | <ul style="list-style-type: none"> • Notes an interesting or unexpected test case (e.g. test fails when expected to pass) • Pins test (if applicable, e.g. NaNofuzz) • Compares test case outputs to PUT description • Edits test parameters by passing surrounding values from the input space • Experiences change in emotional state (verbal cues) |