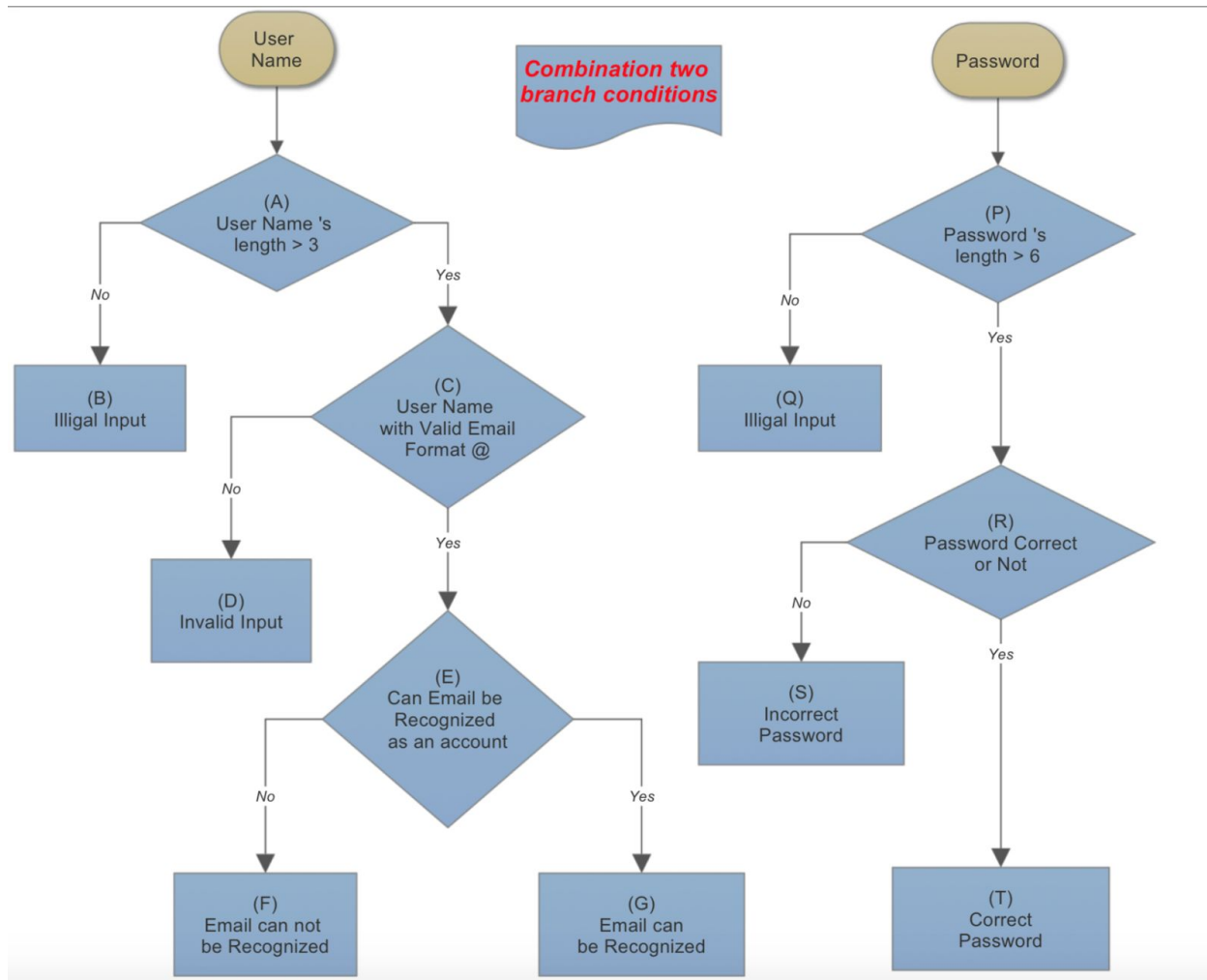


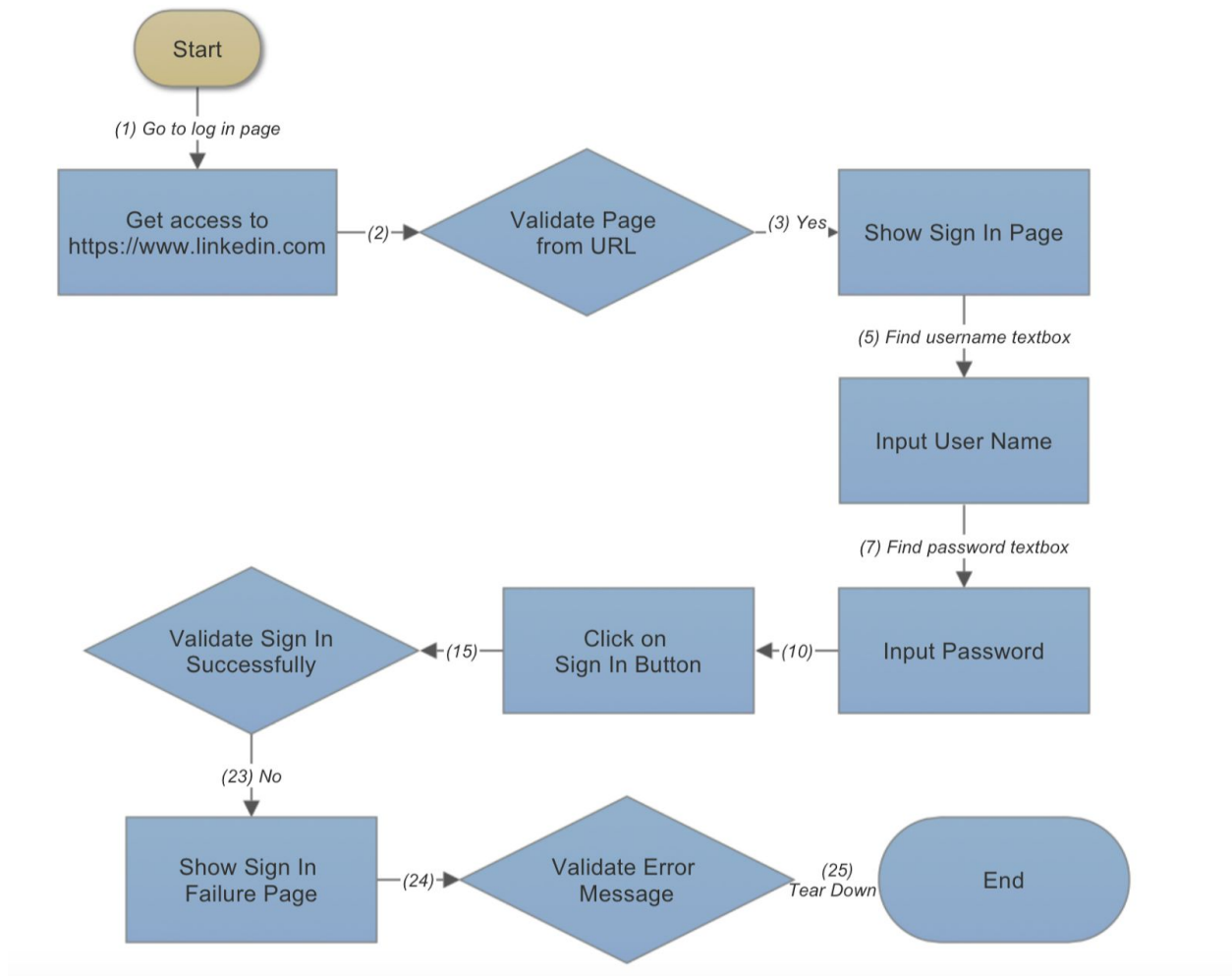
The goal of test scenario 2 is to test unsuccessful sign-in in the negative paths. The path should be all covered (in Graph 2) but different test cases can be generated according to different input username and password.

The two conditional flow graphs (in Graph 1) show all the states of inputs. In order to generate minimum maximized-covered paths, the following combinations are used for testing:

- (a) Combination B+Q (Illegal username and password)
- (b) Combination D+Q (Invalid username and illegal password)
- (c) Combination B+R (B+S and B+T, Illegal username but legal password)
- (d) Combination D+R (D+S and D+T, Invalid username but legal password)
- (e) Combination F+Q (Not-email-format username and illegal password)
- (f) Combination G+Q (Legal username but illegal password)
- (g) Combination F+R (F+S and F+T, Not-email-format username but legal password)
- (h) Combination G+S (Legal username but incorrect password)



Graph 1



Graph 2