

Software Development Methods

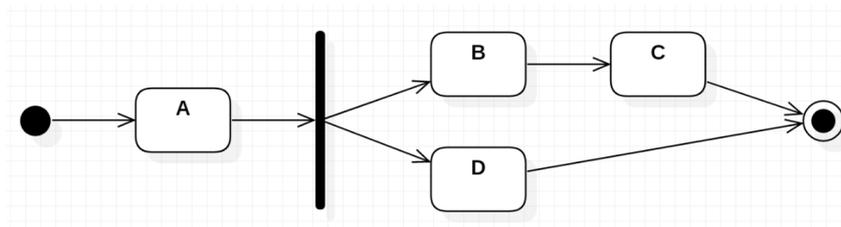
Lab 5: Activity Diagrams

The Software Development Methods Team

October, 2018

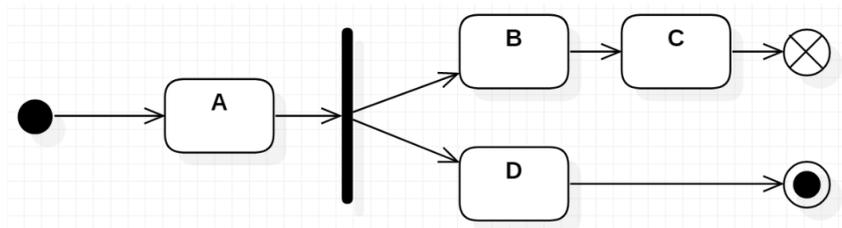
1 The nuts and bolts of Activity Diagrams

- 1.1 Which of the following action sequences are possible during an execution of the activity diagram?



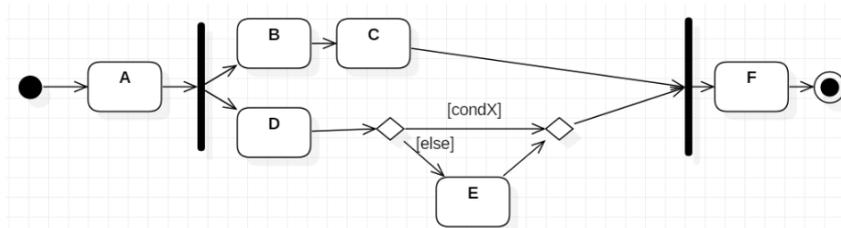
1. A B D
2. A B D C
3. A B C D
4. A B C
5. A D

1.2 Which of the following action sequences are possible during an execution of the activity diagram?



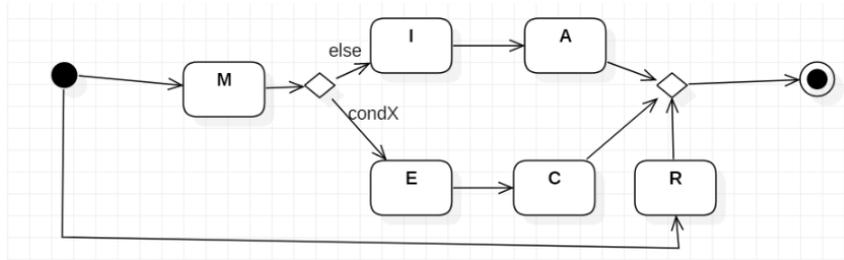
1. A B C
2. A B C D
3. A D
4. A B D C
5. A B D

1.3 Which of the following action sequences are possible during an execution of the activity diagram?



1. A B C D E F
2. A D B C F
3. B C D F
4. A B C D F
5. A D E F
6. A D E B C F
7. A B C D E
8. A D F
9. A B D C E F

1.4 Which of the following action sequences are possible during an execution of the activity diagram?



1. M I A
2. M I A R
3. M R
4. M E C
5. M E C R
6. M I A R E C
7. M E C I A R

2 Mooshak submission

Consider an activity where a student is supposed to make an Object Oriented programming assignment and submit it to Mooshak. The first thing to do is to download the document with the assignment description and a set of example tests (the order in which the student does this is irrelevant). After downloading and reading the assignment document, the student develops a program. Once the student thinks the project is good enough, it is time to start testing it with the set of sample tests downloaded from Moodle. The student tests the program with each of the tests. Whenever one test fails, the student programs a bit more, to fix the problem. Once the student believes the problem is fixed, the student starts testing again. When the software passes all the tests locally, the student submits it to mooshak. Mooshak evaluates the submission, executing, one by one, its own tests, which may be different from those available to the student. Even if some of the tests fail, Mooshak tests them all. For each passed test, Mooshak adds a number of points to the assignment score. If a test fails, mooshak does not add points to the assignment score. When Mooshak's testing process is finished, it returns an answer to the participant: either "Accepted", or "Wrong Answer". This is followed, in any case, by the total number of points. Regardless of the answer, the student may choose to go back, improve the code, and re-submit, if the student so decides.

Please represent the Mooshak submission activity. You should clearly distinguish the student, Mooshak, and moodle, in this process. Feel free to use call activity nodes to keep your activity model easy to understand. Please note the student may also give up making more submissions at any time. Last, but not the least, when the deadline passes, Mooshak stops accepting submissions.