



Explanation: This is a sequence diagram which represents the sequence of events happening when using the TypeCounter class. First, the user provides a directory path and a java type as command line arguments. Second, countJavaFiles method gets called to count the number of java files in that directory. Third, getFilesPaths gets called and returns the paths in an array of strings. Fourth, getFilesNames gets called and returns the names of java files in an array of strings. Fifth, we enter a loop in which we get the content of each java file by calling the getFilesContent method. After that, parseFiles method gets called to create the AST of each file. Then, countTypes method gets called to count the declarations and references of the java type that the user specified as input. Finally, we exit the loop and print the results.