**Homework – Sequence Diagram**

You may work in your project group on this assignment, or in a subset of your project group, provided that all members work collaboratively on the solution. You may also work individually if you choose.

**Assignment**

Draw a sequence diagram for the situation where *m1* in the C class is called (see code on next page)

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| --- | --- |
| **public class A {**  **public static void main(String[] args) {**  **C c = new C();**  **c.m1();**  **}**  **}**  **class B {**  **C c;**  **int z;**    **public B(){}**  **}** | **class D {**    **public D() { go(); }**  **public void init() { go(); }**  **public void go() { }**    **public void calc(C c) {**  **int z = c.getVal();**  **}**  **}**  **class E {**  **public void setSpeed() {}**  **public void execute() {}**  **public void reset() {}**  **}** |
| **class C {**  **ArrayList<D> dCol;**  **E e;**  **boolean isReady;**    **public C() {**  **System.out.println("create C");**    **isReady = Math.random() < 0.2 ? true : false;**  **dCol = new ArrayList<D>();**    **for( int i=0; i<9; i++ ) {**  **D d = new D();**  **dCol.add(d);**  **}**  **e = new E();**  **}**    **public void m1() {**  **System.out.println("m1()");**    **for( D d : dCol ) {**  **d.calc(this);**  **}**    **if ( isReady )**  **e.setSpeed();**  **else {**  **for( D d : dCol ) {**  **d.init();**  **}**  **e.reset();**  **}**  **e.execute();**  **}**    **public int getVal() {**  **return (int)Math.random();**  **}**  **}** | |

**Deliverables**

Print and staple the Sequence Diagram, Submission Document. Turn-in in class on the due date.