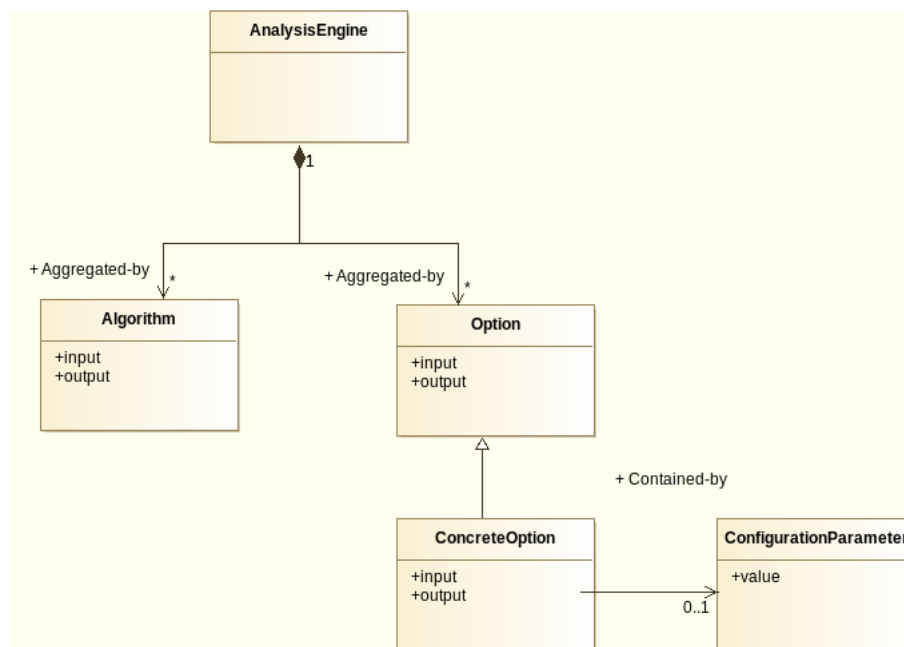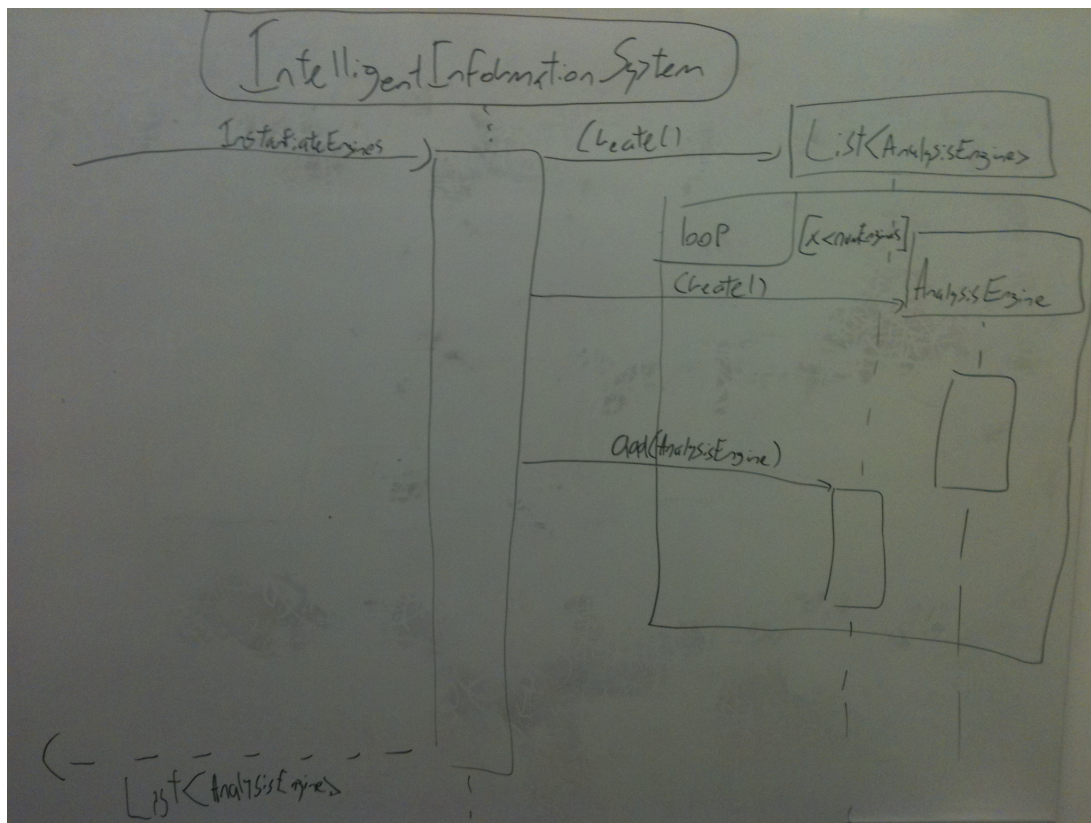Figure 1: UML for question 1

Figure 2: UML for question 2

Figure 3: Sequence diagram for question 3