<Online Flight Tracking System>

Software Modeling

<Phase 2>

<April 22, 2018>

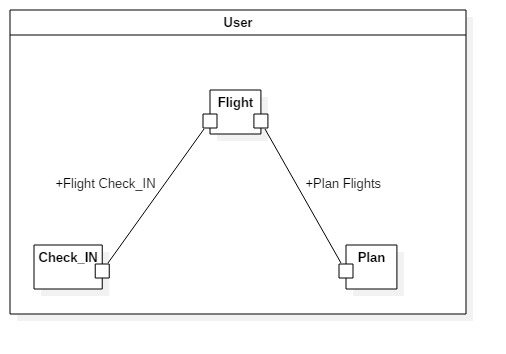
<Abdulrhman Ali Alsenedi/436101804>

<Abdulmajeed Saleh Alaskar/436104024>

<Khalid Abdulhadi Alqahtani/434105057>

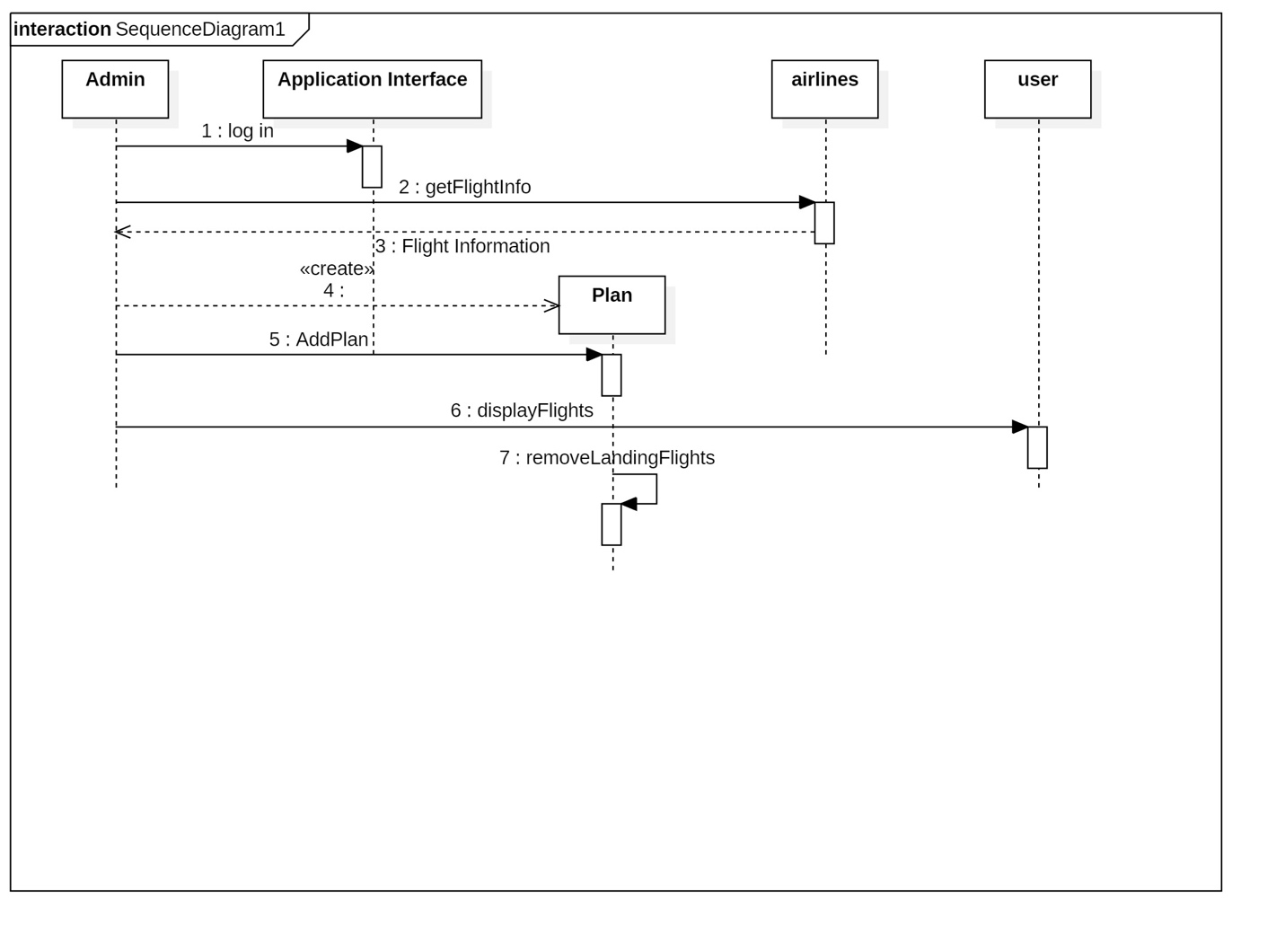
<Asim Mohammed Alali/435102899>

**Composite Diagram :**

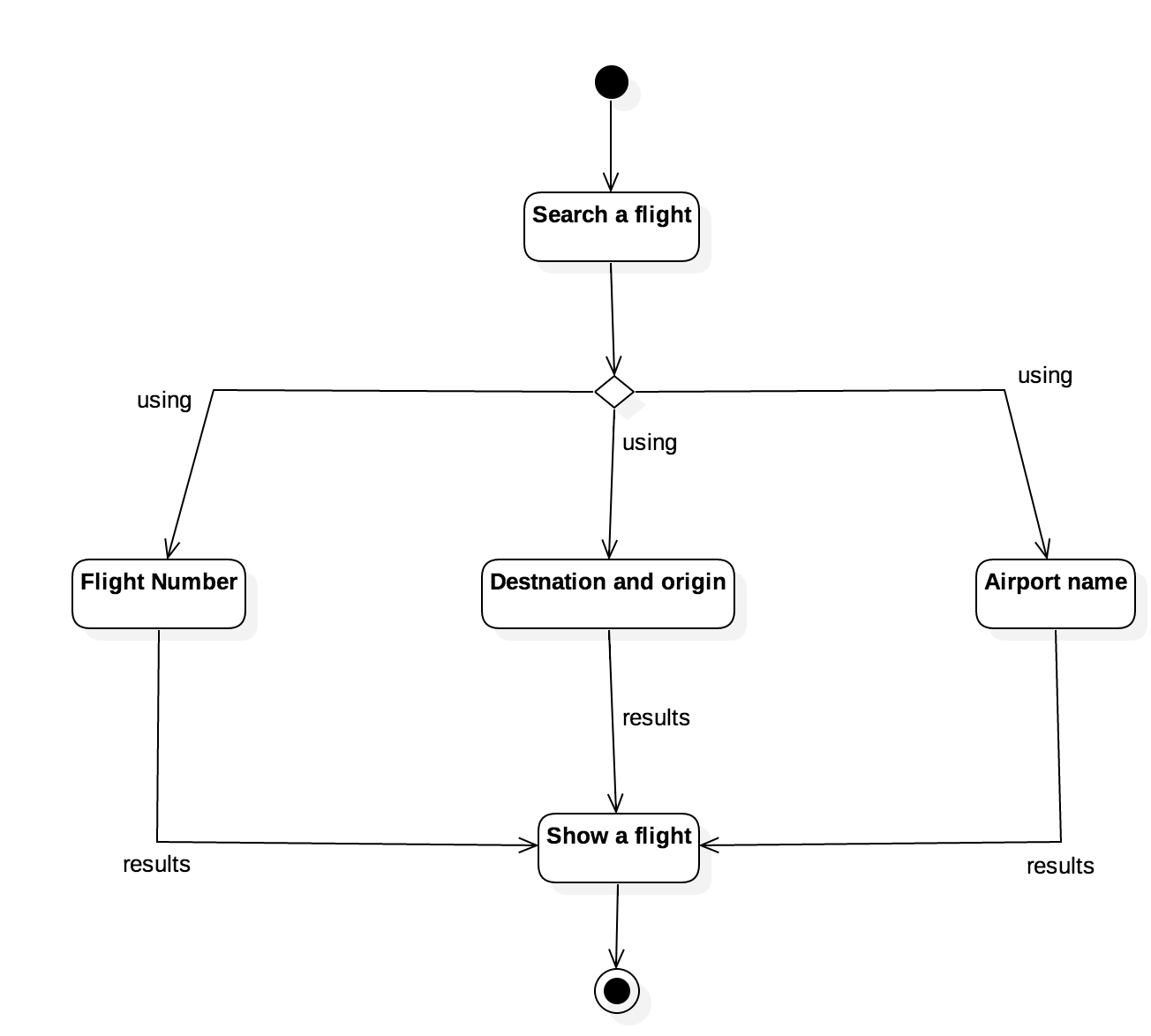


# We need composite diagram for User class because it is the point where to many classes join and communicate depending on event that’s trigger by User class

**Sequence Diagram & Communication for critical use cases :**



**State Diagram :**



**Java Code Transformation:** 

Java Code Transformation

/\*\*

\*

\*/

**import** java.util.Set;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@author** 36s467

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **class** User {

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Object Id;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Object name;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Set<Plan> plan;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Set<Check\_In> check\_In;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Set<Flight> flight;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** getName() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** setName() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** getID() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** setID() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

}

=============================================================================

/\*\*

\*

\*/

**import** java.util.Set;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@author** 36s467

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **class** Plan {

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Object planName;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Set<Flight> flight;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** setPlanName() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** getPlanName() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

}

=============================================================================

/\*\*

\*

\*/

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@author** 36s467

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **class** Check\_In {

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Object bookNum;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Flight flight;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** getBookNum() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** setBookNum() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

}

=============================================================================

/\*\*

\*

\*/

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@author** 36s467

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **class** Flight {

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Object flightNum;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Object flightTime;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Object flightDate;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Object flightStatus;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** **void** getFlightInformative() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** getFlightStatus() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** setFlightStatus() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** getFlightDate() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** setFlightDate() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** getFlightTime() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** setFlightTime() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** getFlightNum() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** setFlightNum() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

}

=============================================================================

/\*\*

\*

\*/

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@author** 36s467

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **class** flightInformativeGetter {

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**private** Object APIsAccessAuthorization;

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** setAPIsAccessAuthorization() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

/\*\*

\* <!-- begin-UML-doc -->

\* <!-- end-UML-doc -->

\* **@generated** "UML to Java (com.ibm.xtools.transform.uml2.java5.internal.UML2JavaTransform)"

\*/

**public** **void** getAPIsAccessAuthorization() {

// begin-user-code

// **TODO** Auto-generated method stub

// end-user-code

}

}