**Name:** Fire at Target

**Identifier:** Missile System

**Preconditions:**

Image is processed and target coordinates are sent to missile system

**Postconditions:**

Missile fired at target. Image system notified missile fired.

**Couse of Action:**

1. The Use case begins when the Images system sends coordinates to missile system.

2. The Missile system moves to the given coordinates.

3. The Missile system fires at the target.

4. The Missile system notifies Image system Missile fired.

**Alternate Course A:**

A.1 The Use case begins when the Images system sends coordinates to missile system.

A.2 The Missile system determines the Coordinates are out of range.

A.3 The missile launcher does NOT move.

A.4 The Missile system notifies Image system Missile NOT fired.

**Name:** Process an Image

**Identifier:** Image System

**Preconditions:**

Competition is selected by user

**Postconditions:**

Images system in wait state to send next coordinates to missile system.

**Couse of Action:**

1. The Use case begins the user has selected the competition.

2. The Image system captures an Image.

3. The Image system locates targets on image.

4. The Image system gets coordinates of targets.

5. The Image system sends a set of coordinates to Missile system.

6. The Images system gets ok from Missile system.

7. The Image system repeats 5 and 6 till all missile fired or all targets fired at.

**Alternate Course A:**

A.1 The Use case begins the user has selected the competition.

A.2 The Image system captures an Image.

A.3 The Image system locates targets on image

A.4 The Image system determines which are Foe targets.

A.5. The Image system gets coordinates of Foe targets only.

A.6. The Image system sends a set of coordinates to Missile system.

A.7. The Images system gets ok from Missile system.

A.8. The Image system repeats 6 and 7 till all missile fired or all Foe targets fired at.

**Name:** Complete System High Level

**Identifier:** TDS complete

**Preconditions:**

User wants to use TDS

**Postconditions:**

Missiles fired at targets

**Couse of Action:**

1. The Use case begins when a user starts the TDS application.

2. The GUI is displayed.

3. The user selects a competition

4. A timer is updated on GUI

5. Targets are marked on GUI

6. Missiles are fired at Targets.

7. Timer on GUI stops

**Alternate Course A:**

A.1 The Use case begins when a user starts the TDS application.

A.2 The GUI is displayed.

A.3 The user selection competition

A.4 A Timer is updated on GUI

A.5 NO Targets are found

A.6 One minute passes, GUI notifies user no Targets found.

A.7 GUI is reset to its initial state.