Title: High Level Flow Chart and Class Diagrams
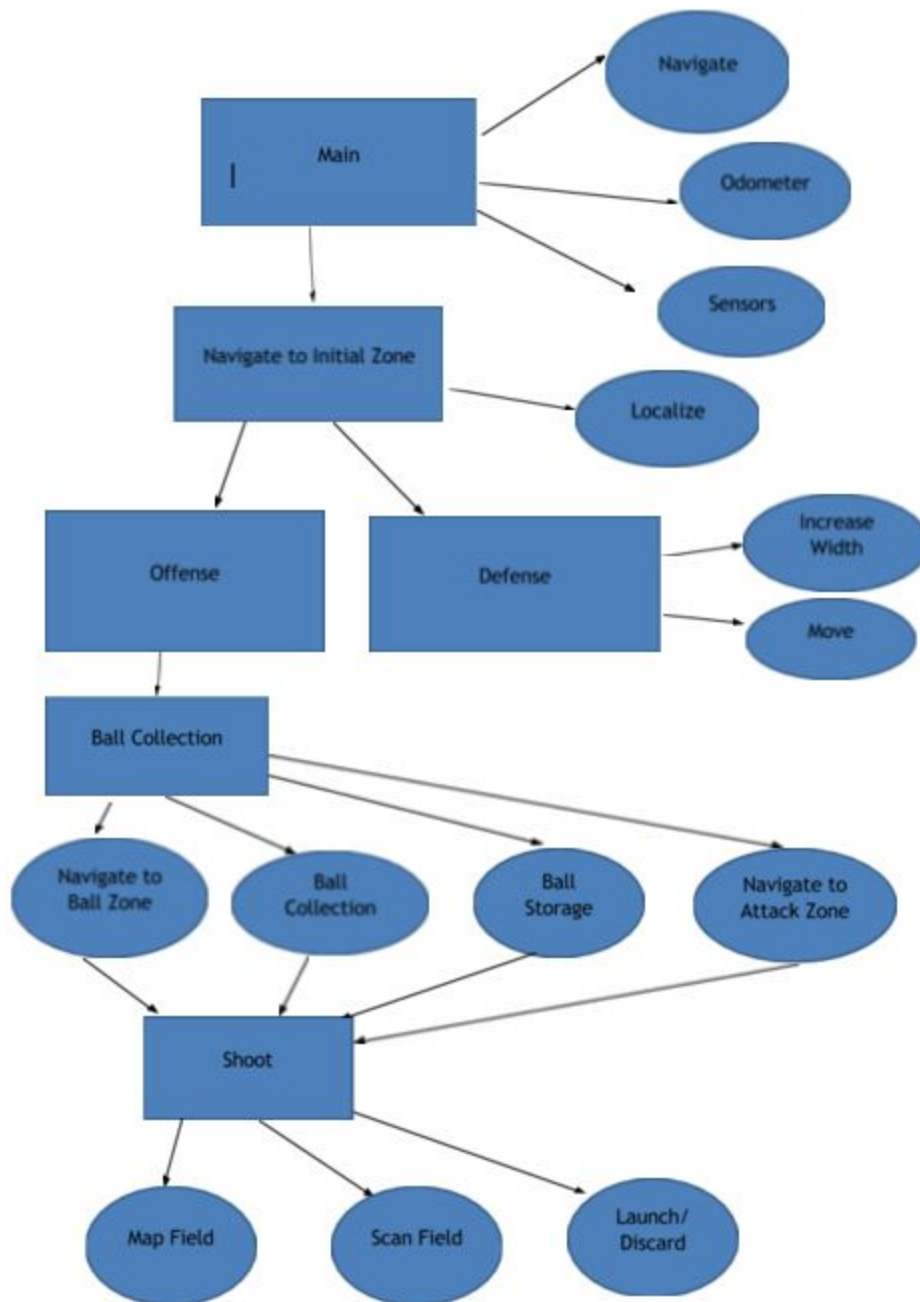**Document Version Number**: 1.1
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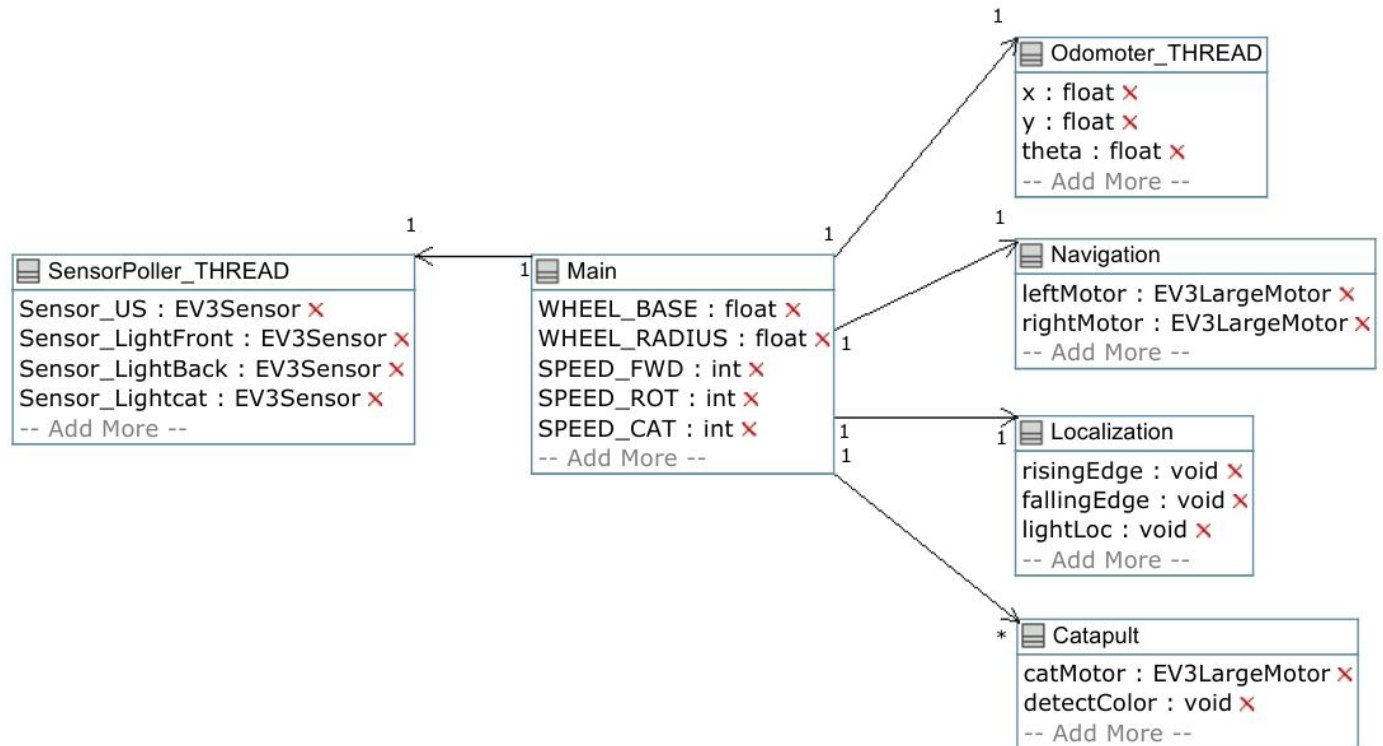   2016/03/05 - Nawras - Added Class Diagrams

High Level Flow Chart:

Class diagram:

The following figure has been created on Umple Online (link). It is a class diagram representing the main classes that will be used for the DPM FINAL PROJECT.

The Main class will call SensorPoller, Odometer, Navigation, Localization and Catapult. The main attributes of each classes, such as the X and Y position for the Odometer, are outlined in the figure. The SensorPoller and Odometer classes are threads that are synchronized by a lock. The arrows that link the classes togheter are called associations, and can be interpreted in the following way:

1 Main [launches ->] * Catapult

1 Main [moves with ->] 1 Navigation

1 Main [reads ->] 1 SensorPoller

To complete the Soccer Playing Challenge outlined the high level flowchart, java classes are created with respect to the class diagram. The skeleton of the software has been committed to GitHub, and the core coding can now begin.