**Data-Driven Decisions Aid Tool Implementation Document**

**By: Team 1**

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**Implementation Language:**

The preferred implementation language chosen for this system was JAVA as this language was most comfortable for all members of the team. Along with JAVA we worked with .kml files which were just XML files with predefined tags. Although we did not use XML in the actual implementation of the system, as the output we appended overlay tags to a .kml file in order to display the routes found by our algorithm.

**Coding Convention:**

**File Names:**

* + *suffix*.kml – Represents a google map file.
  + *suffix*.java – Represents the source code of a particular class.

**File Header:**

Each source file should have the following corresponding header:

/\*

\* Shahid Akhter, Kevin Friesen,

\* Stacey Montresor, Matthew Mullan,

\* Jonathan Summerton

\* Data\_Driven Decisions Aid Tool

\* MSE Project

\* Software Engineering I

\* Dr. Rusu Fall 2010

\*/

**Comments:**

Comments which begin before a method provides a description of what the method does, a description of a parameter the method may take, and what it may return.

Example:

/\*\*

\* This is a description of some method A

\* @param someParam represents a parameter which method A utilizes.

\* @return some value which will be returned

\*

\*/

Comments may also be randomly places inside a method or instructor to offer additional clarification and are marked with two ‘/’’s.

Example:

public someMethodA(int param)

{

Param = param + 1; //This increments param by 1.

}

**Variable Names:**

Variables in java are required to be assigned a type.

Examples:

In general: type someRandomParameter;

int someNum;

float someFloat;

List<Integer> listOfIntegers;

**Method Arguments:**

Methods should be named in such a way that it should be clear what the method accomplishes. Methods are called on by their corresponding class or within the class itself. They also can be called with or without parameters.

Examples:

distance = someLocation.findDistance(anotherLocation);

distance = findDistance(anotherLocation);

**Parenthesis, Braces, and Indentation:**

The body of a control structure, logic structure, class, and class method all begin with a curly brace after the initial title/arguments on a separate line. The first bit of code is then started another line after the initial curly brace and is indented in order to maintain a clear and understandable format. After the code is completed the a final curly brace is added on a new line immediately after the final line of code.

Example:

Public class SomeClass

{

…

Public someMethodA(int param)

{

…

}

}

**Control Structures:**

if(condition)

{

…

}

else if(condition)

{

…

}

else

{

…

}

while(condition)

{

…

}

for(initialize loop control variable(LCV); compare with LCV; adjust LCV)

{

…

}

A for each loop is utilized to go through each element in a List.

Example:

for(TypeA someVariable: someListOfTypeA)

{

…

}