#### Index

#### Contenido

Understanding Data Input	1
Establishing Data Structure	1
Functions	1
Classes	1
Scrum	

Assume we have the following units:

$$Cost = \frac{distance}{speed} = \frac{m}{\frac{m}{s}} = \frac{m * s}{m} = s = time$$

Take this into account:

"Notes:

The order of the actions is determined by the destination state whose identifier is the lowest, that is, if different (partial) destinations can be reached at a given point (intersection), they will be visited in increasing numerical order".

# **Understanding Data Input**

address: zone of Albacete we are in .

distance: idk

initial: initial state

final: goal state

**intersections**: a list of dictionaries with attributes **identifier**, **longitude** and **latitude** 

segments: a list of dictionaries with attributes origin, destination, distance and speed

## **Establishing Data Structure**

### **Functions**

Function	Input	Output
search	(Problem, State)	return listOfActions
testGoal	(State)	return boolean
succesor	(Node)	return Node

search: can be only one function that prompts the user for a number between 0 and 2 being

0: depth-first

1: breadth-first

### 2: random

I don't really see the idea of search being an abstract class.

### Procedures

Procedures	Input
initializeOpen()	(initial)

### Classes

<b>O</b> ta6000		
State -accumulatedCost: float initializeOpen()	Node -state: State -parent: pointer	Search (abstract)
Problem	Action	
BreadthFirst <b>inherits</b> Seach		DepthFirst <b>inherits</b> Seach

# Scrum

Tasks	Agus	Jesús
-Implement DepthFirst		
-Implement BreadthFirst		
-Implement RandomSearch		
-Define Problem		
-Define Node		
-Define State		
-Define Action		