

# Group Declaration - Group null 02285 AI & MAS

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June 2, 2015

## **The Experience of Working Together**

Some members of the group have expressed their discontent, in regards to the work distribution of this project. One member in particular has consequently neglected to do his share of the work. Hence the general consensus is that the workload has *not* been evenly distributed, but the remaining two members have been doing the majority of the work.

# 1 Ideas

## 1.1 Daniel

- Conflict Resolution for Boxes in the Way
- Conflict Resolution when an Agent is in the way
- Conflict Resolution, for detecting Cycles
- Clustering of Goals
- Distance Maps
- Goal Selection Heuristic

## 1.2 Kasper

- Overall Online Planning Methodology
- Planning for a Single Agent
- Planning for Multiple Agents
- Double Search, on a Relaxed Domain
- Goal location prioritisation
- Primary Goal Solving Heuristic

## 1.3 Martin

- Main literature search.

## 1.4 Joint Effort

- Online Re-Planning

# 2 Project, Programming, & Code

## 2.1 Daniel

- `client.Conflict`
- `client.Settings`
- `client.heuristic.ClearRouteHeuristic`
- `client.heuristic.OutOfTheWayHeuristic`
- `client.heuristic.Proximity`
- `client.node.GoalState`
- `client.node.level.Level`

- `client.node.level.clustering.KClusteringGoals`
- `client.node.level.distancemap.BasicManhattanDistanceMap`
- `client.node.level.distancemap.FloydWarshallDistanceMap`
- `client.node.storage.Base`
- `client.node.storage.Box`
- `client.node.storage.Goal`
- `client.parser.ArgumentParser`
- `client.parser.LevelParser`
- `client.parser.SettingsContainer`
- `client.utils.History`

## 2.2 Kasper

- `client.SearchAgent`
- `client.SearchClient`
- `client.Strategy`
- `client.heuristic.AStar`
- `client.heuristic.GreedyRouteHeuristic`
- `client.heuristic.Greedy`
- `client.heuristic.Heuristic`
- `client.heuristic.WeightedAStar`
- `client.node.Node`
- `client.node.storage.LogicalAgent`
- `client.node.storage.SearchResult`

## 2.3 Martin

- `client.parser.RouteParser`
- `client.parser.StrategyParser`
- `client.node.storage.ExpansionStatus`

## **3 Report**

### **3.1 Daniel**

- 4.2 Distances in the Map
- 4.4 Conflict Resolution
- 5.0 Introduction to Section
- 5.1 Testing Methodology
- 5.2 Comparison of Search Strategies
- 5.3 Distance Maps
- 7.0 Introduction to Section
- 7.1 Improving the Current Approach
- 7.3.2 Controlling NPCs

### **3.2 Kasper**

- 4.0 Introduction to Section
- 4.1 The Heuristic
- 4.3 Search
- 5.4 Goal Dependency
- 7.2 New Approaches
- 7.3.0 Introduction to Section
- 7.3.1 Sokoban

### **3.3 Martin**

- 0.0 Abstract
- 1.0 Introduction
- 2.0 Background
- 3.0 Related Work

### **3.4 Joint Effort**

- 6.0 Discussion