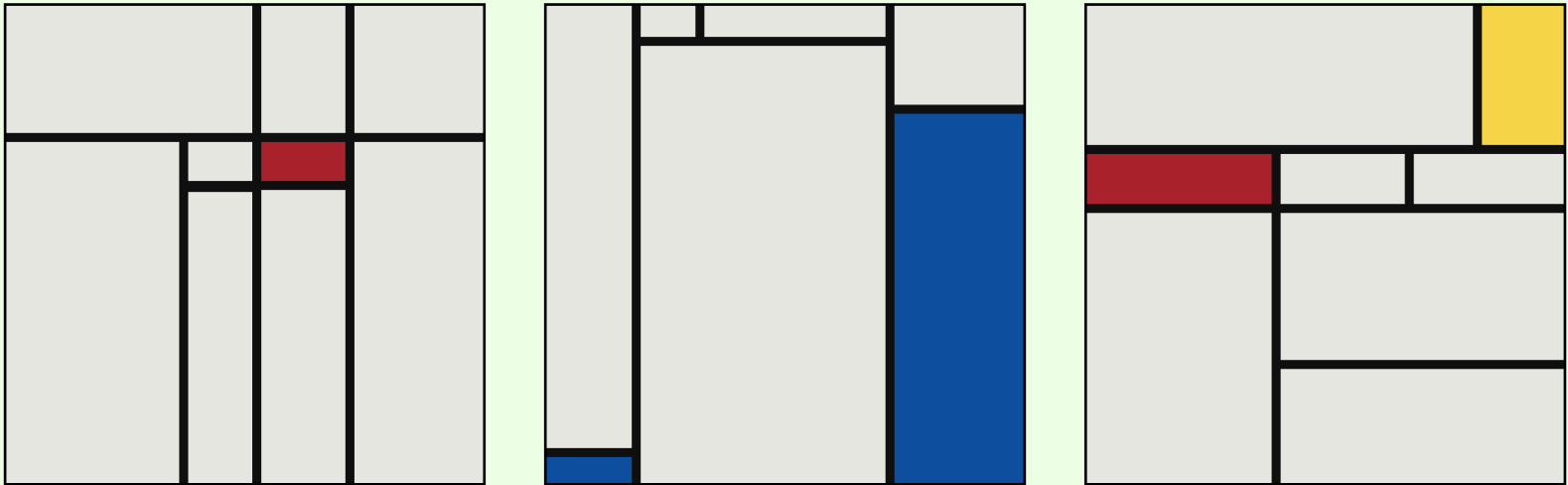


Interactive Selection

Nor Nazrina Mohamad Nazry, Tom Gedeon

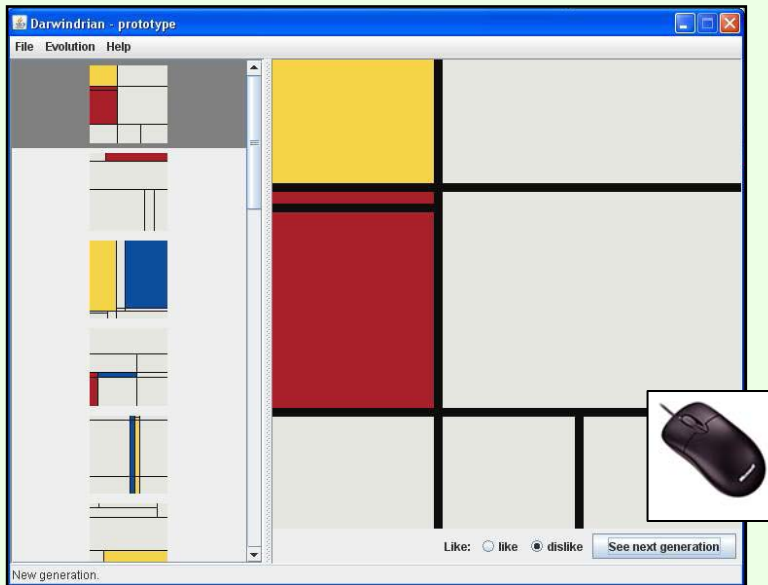
COMP8780 Information & Human Centered Computing Project
Master of Computing
July 2009

Selection of Preferred Pictures

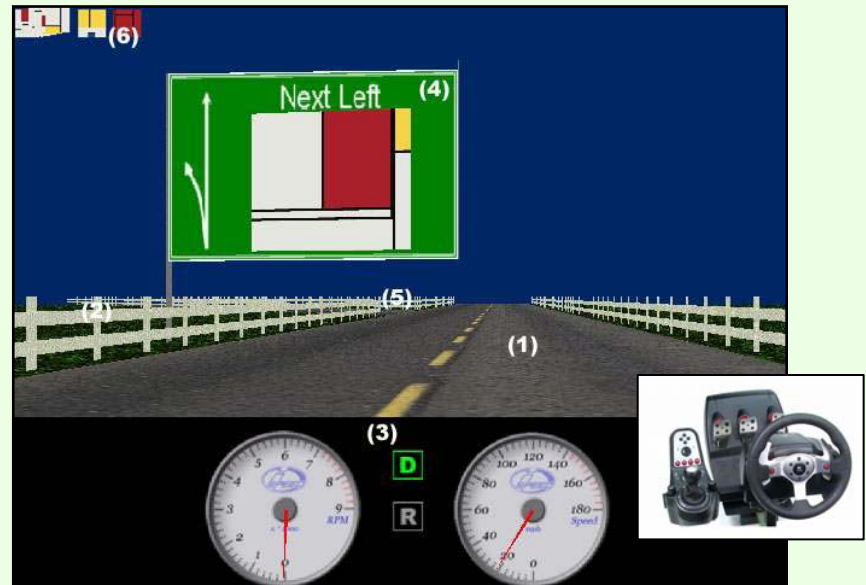


Examples of Pictures (“Mondrians”)

Using Different Approaches

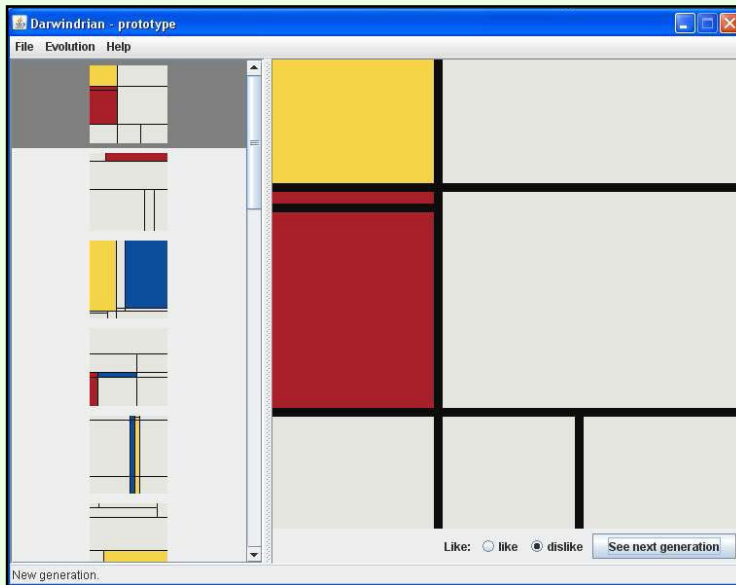


Mouse Interface

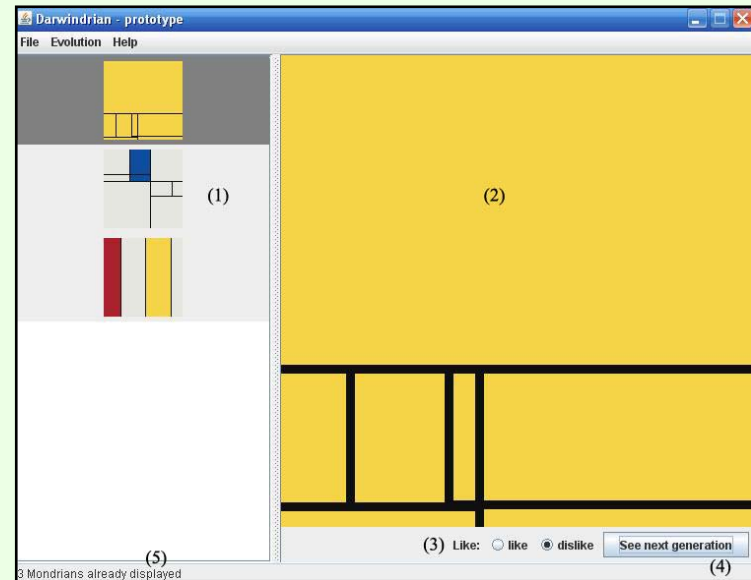


Driving Interface

Modification of Mouse Interface

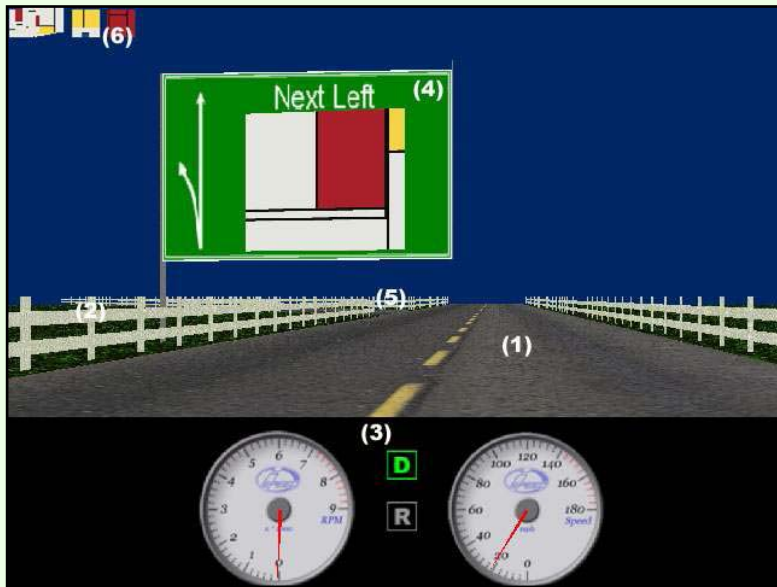


Mouse Interface – Previous Work

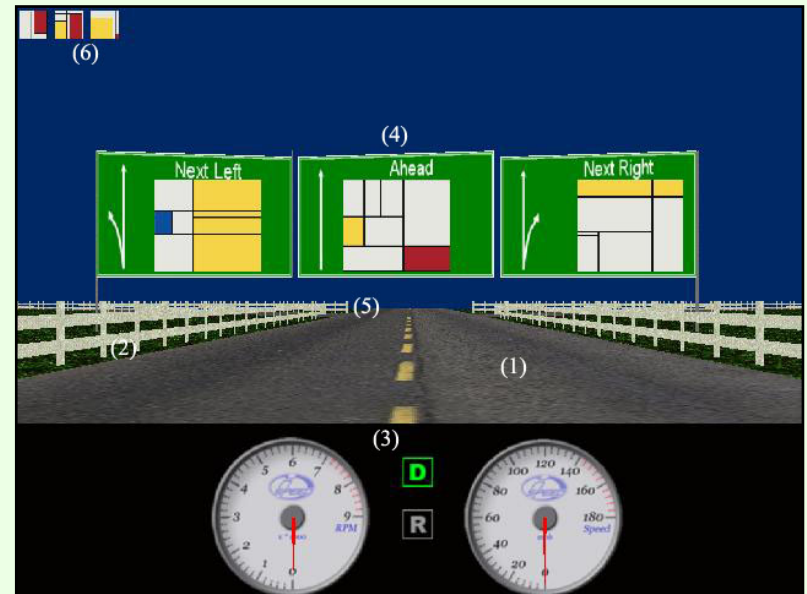


Mouse Interface – Current Work

Modification of Driving Interface



Driving Interface – Previous Work



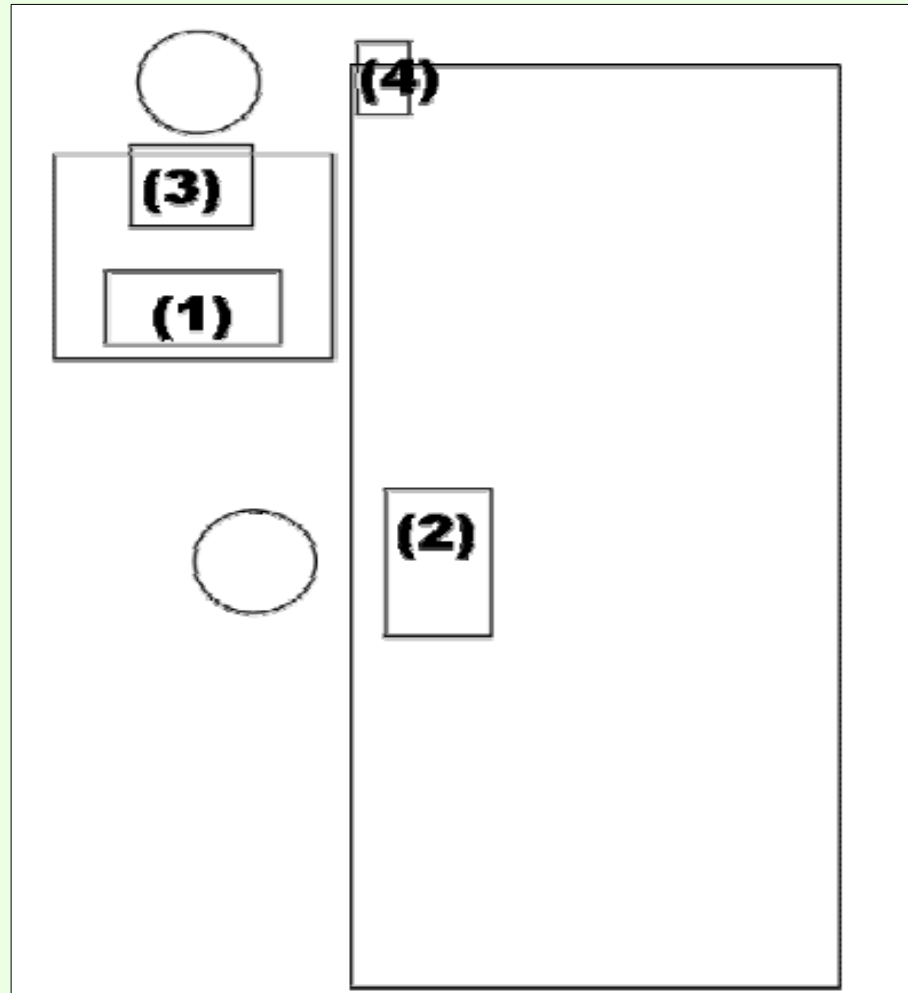
Driving Interface – Current Work

Experiment - Designs

Experiment (Description)	Mondrian(s) Displayed at One Time		Users
	Mouse Interface	Driving Interface	
Current (3:3)	3 (70 sets x 3 Mondrians)	3 (70 sets x 3 Mondrians)	6
Current (3:1)	3 (70 sets x 3 Mondrians)	1 (210 sets x1 Mondrian)	6
Current (20:3)	20 (10 sets x 20 Mondrians) + (1 set x 10 Mondrians)	3 (70 sets x 3 Mondrians)	6
Previous (20:1)	20 (20 Mondrians originally and less one for each new set)	1 (210 sets x1 Mondrian)	14

Total of Mondrians Displayed for Each Interface: 210 Mondrians

Experiment – Layout



Results - Analysis

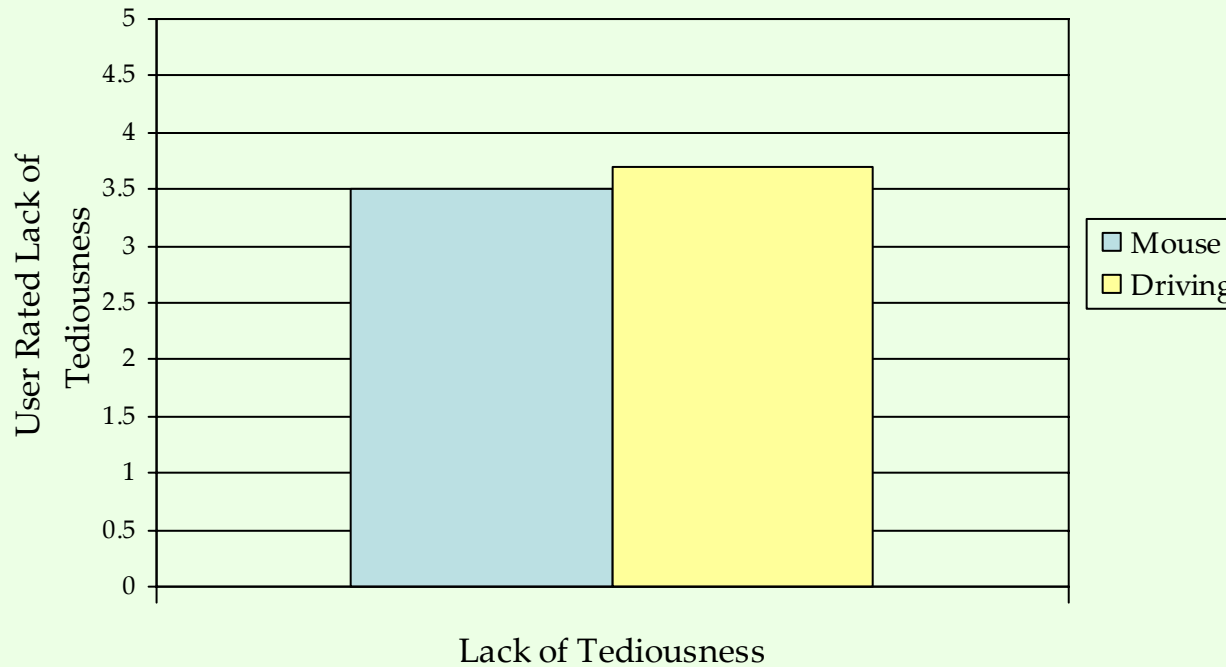
- Types of Analysis
 - Qualitative analysis (speed, tediousness, ease of selection, ease of learning)
 - Quantitative analysis (no. of Mondrians selected, learning speed, average speed)
- Analyzed under 4 Factors
 - Interface the user rates (mouse, driving)
 - The group the user is in (“Driving then Mouse” or “Mouse then Driving”)
 - User’s computer skill (good or average or bad)
 - User’s driving skill (good or average or bad)

Results – Rank of User

Experiment (Description)	Rank of User						User
	Computer Skill			Driving Skill			
	Good	Average	Bad	Good	Average	Bad	
Current (3:3)	6	-	-	2	2	2	6
Current (3:1)	6	-	-	3	-	3	6
Current (20:3)	6	-	-	1	1	4	6
Previous (20:1)	12	2	-	5	5	4	14

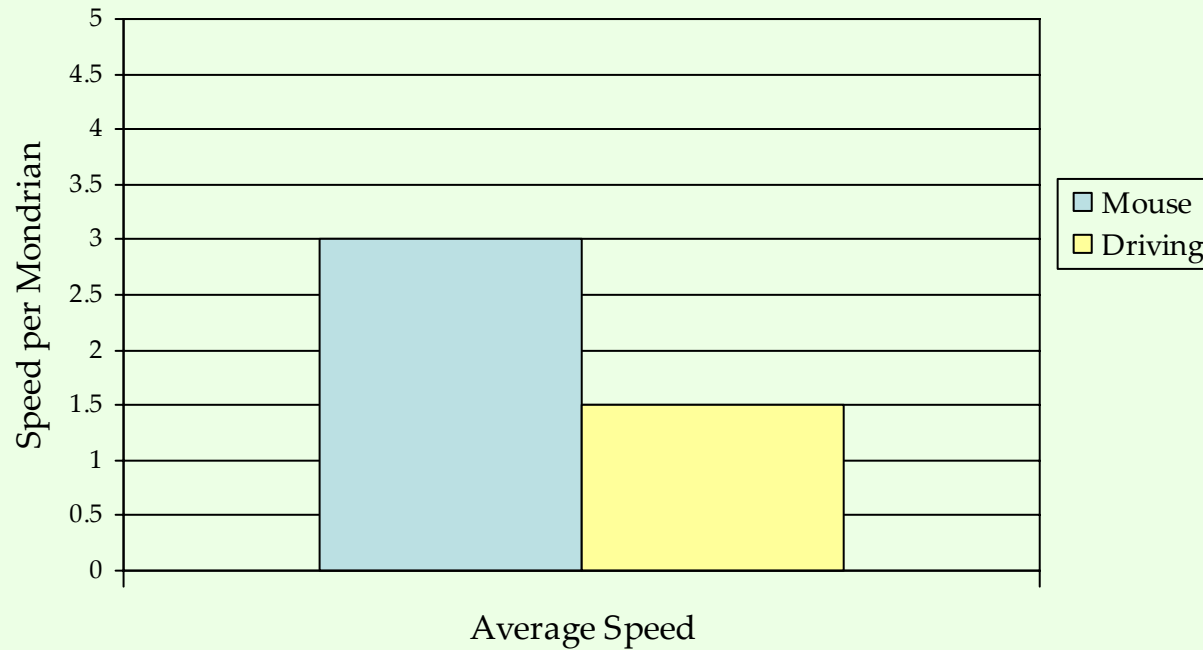
Results – Qualitative Analysis

**User Rated Tediousness by Interface
Current (3:3)**



Results – Quantitative Analysis

**Average Speed by Interface
Current (3:3)**



Conclusion

- Results Discussion
 - Same rating of qualitative analysis – driving interface is as fast and intuitive as mouse interface (Previous work – driving interface was slow)
 - Mouse interface – a bit more tedious (Previous work – driving interface was much more tedious)
- Future Work
 - Comprehensive test
 - Redesign the layout of mouse interface
 - Improve the quality of driving interface