IPRO 306
Wheelchair Basketball Computer Game
Project Background

- **Fall 2002**: To create a rudimentary interface of the game

- **Summer 2003**: To gauge the market potential of the game and the steps needed to fully develop the product

- **Summer 2004**: To produce a report containing background information & analysis that can be put to use directly and immediately in the Fall 2004 Avoidatrak IPRO.
Organization

- Explanation of WBB
- Competitive Leagues
- What to incorporate in the game?
NWBA
(National Wheelchair Basketball Association)

- Governing body for WBB
- Oldest such organization in the nation
- Organizes grass roots development programs
- Selection, training and fielding of the national team
- 185 teams in 6 different divisions compete under the NWBA
IWBF
(International Wheelchair Basketball Federation)

- Establish rules, handbook, specifications for facilities & equipment, internal regulations
- Establish standards for training of referees, commissioners and examiners
- Raise funds, collect fees and accept contributions and subsidies
- Implement an organized marketing program that involves communication, public relations and demonstration events
Competitive Leagues

Four different zones depending on location
- Afro-Arab Zone
- Americas Zone
- Asia-Oceania Zone
- Euro Zone
What to incorporate?

- Which leagues
- Players’ identification
Which leagues

- International, why?:
  - Variation in game scenery
  - Variation in appearance
  - Educational Tool
  - International marketability
Players’ Identification

- Generic cartoon faces, because it would be expensive to acquire rights from IWBF
- Co-ed teams which would allow the game to appeal to a wider scope which has always been an underlying goal
Psychological Aspects

- Recreational opportunity
- Vent for their frustrations
- Bonding with teammates
- Building self-esteem
Recommendations

- Concentrate on the fact that this game is unique and appealing
- Continue interaction with the wheelchair basketball players and coach
- Recommend that the game be set in the international arena
- Usage of both female and male wheelchair basketball players
Rules

- Times
- Court and Equipment
- Game
- Personal foul
Player Skills

- Individual skill without the ball
- Individual skills with the ball
- Basic offensive skills
- Basic defensive skills
Classes and Point Value

- Class1
- Class2
- Class3
Gameplay - Modes of Play

- Training and practice
  - Game introduction via interactive coach.
- Minor (Novice)
  - Simplistic controls and fully mobile team.
  - Most tasks are automated.
- Major (Intermediate)
  - Team creation on a balancing system.
  - Strategy and controls become more complex.
- Professional
  - Complete, realistic controls.
  - Players control team formations.
Gameplay - Interfaces

- Novice controls
  - Provides a simple and effective introduction to the game by reducing the conceptual requirements of realistic control of an independent-wheel vehicle.
  - Single analog-stick or digital-pad.
  - Only directional control.
  - Simple enough for single handed gameplay.
Gameplay - Interfaces

- Advanced controls
  - Increased realism to the wheelchair control.
  - Controller has four pressure-sensitive buttons.
  - Buttons manipulate each wheel independently in two directions with varying intensity.

[IMAGE PS2 Control, L1,L2,R1,R2]
Gameplay - Interfaces

- Expert controls
  - Greatest realism from a standard controller.
  - Controller has two analog sticks to provide rotational representation of the wheels.

[IMAGE PS2 Control, two arrows up]
[IMAGE PS2 Control, two arrows opposite]
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Questions?