# Game Design and Development (UCS646)

# **Blazing Tyres**

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## How to play

#### 1. Movement Controls:

- Use the W or ↑ key to move the car forward.
- S or ↓ to move the car backward/soft brake.
- A or ← to move the car in the left direction.
- D or  $\rightarrow$  to move the car in the right direction.
- Space key to hard brake the car.

#### 2. Vehicle Indicator Controls:

- Use the Q or E key to turn on/off the left or right indicator respectively.
- Use the L key to turn on/off headlamp.
- Use the K key to change the intensity of headlamp.

#### 3. Miscellaneous Controls:

- Use the mouse to adjust the camera angle.
- Use the C key to change view mode.
- Use the B key for Car's Front View

#### 4. Objective:

• Compete against opponents to reach the finish line first or complete a lap within a specified time limit. Utilize speed, skillful driving, and strategic decisions to secure victory. Win by outpacing AI rivals and navigating challenges. Explore diverse game modes and cars for varied racing experiences.

#### Hardware/Software Constraints

The limitation we face is not hardware-related but rather software-based, specifically pertaining to the input method for gameplay. Our game design is restricted to accommodate keyboard and mouse inputs exclusively. This constraint necessitates a meticulous approach to game mechanics, user interface design, and control schemes to ensure optimal player experience within these parameters.

By focusing on keyboard and mouse inputs, we aim to provide a seamless and intuitive gaming experience for our players. This decision reflects a recognition of the widespread availability and familiarity of these input devices among our target audience. Additionally, it aligns with our goal of accessibility, as keyboard and mouse setups are standard across various gaming platforms and readily adaptable to different player preferences and abilities.

However, adapting gameplay mechanics exclusively for keyboard and mouse inputs presents its own set of challenges. It requires careful consideration of control responsiveness, mapping of actions to keys, and balancing the complexity of interactions to maintain gameplay depth without overwhelming players. Moreover, user interface elements must be designed with precision to facilitate smooth navigation and interaction without the aid of alternative input methods.

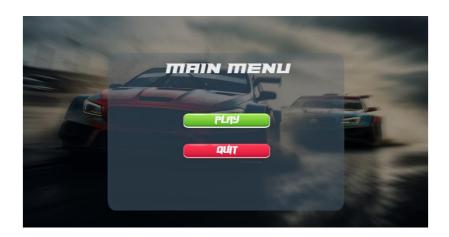
Despite these constraints, embracing keyboard and mouse inputs offers unique opportunities for innovation and creativity in game design. It encourages us to explore novel control schemes, leverage the precision of mouse movements for gameplay mechanics, and optimize user interfaces for efficient navigation and interaction.

In conclusion, while our game development process is governed by the software constraint of keyboard and mouse inputs, we approach this challenge as an opportunity to craft a compelling gaming experience that resonates with players through intuitive controls and accessible design.

# Requirements

The software does not necessitate intensive processing and is graphically lightweight; therefore, no particular specifications are necessary for the application. A modern processor and Windows 7 or later are required for the application to function. The utilisation of the internet is not mandatory for the operation of the game.

## Screenshots



Main Menu



Mode/Car/Map Selection



Speedometer



Location Radar





Game Won/Game Lost



Race Mode