# Platformer Homework

# Concept:

**Platforms:** PC

**Technologies:** UE4

**Languages:**  English

**Rating:**  E

**User Number:**  1

**Gameplay time:**  10 – 180 seconds

**Main mechanic:**  Jumping, switching lanes

**Goal:**Get as high of a score as possible

# Game Character

## Game mechanics and operating

*Actor moving between lanes: left and right arrow keys*

*Actor jumping: spacebar  
Actor dashing down: down arrow key*

## Specific actions

Lane switching: lets player switch between lanes to avoid obstacles

Jumping: lets player avoid obstacles or jump the gaps

Down dash: lets player cut the time between the jumps

# Level Design

## Lanes:

There are 3 lanes on which player can move, obstacles and boosts can spawn on each lane.

## Obstacles:

Fence: can be jumped over, can be avoided

Tree: can’t be jumped over, can be avoided

Gap: can be only jumped over

## Boosts:

Coin: can be picked up for score boost

# Balance

Each tile player earns 1 score point. Coins earn 3 additional points. Coins have 1/4 spawn chance on empty spaces.

Obstacles can spawn randomly on each non-gap tile. 3 trees can’t spawn on a single tile. Obstacles and gaps can’t spawn on first 2 tiles.

Gaps can spawn with 1/6 chance instead of obstacle tile.

Player speeds up by 0.5% each tile, up to 200% of original speed.

# Asset references

Player model and animations – starter UE4 assets

Platforms, boosts and obstacles – from Kenneys platformer asset kit (<https://www.kenney.nl/assets/platformer-kit>)

Sounds – starter UE4 assets and Kenneys interface sounds (<https://www.kenney.nl/assets/interface-sounds>)