CMP-5010B – Computer Graphics I: Coursework Demo

Student ID: Student Name:

Marker:

Date:

TITLE:

I. **Essential** features of the game:

1. The game starts at ground level;   ☐
2. Has at least two levels above ground level;   ☐
3. Each level has to be made up of at least two distinct
   (separated) platforms unless interlaced levels

   (zig-zag from left to right) are used;   ☐
4. The target position of the platform has to be at the highest

   (or furthest) level;   ☐
5. The character(s) can jump from one level to the next both

   horizontally and vertically;   ☐
6. The character can collide with the platforms from all possible
   directions, i.e. it stays on the platform (obviously) but can also

   hit its head when jumping upwards;   ☐
7. A clear objective and scoring system needs to be provided;   ☐
8. The world should be larger than the screen size which means
   the background (world) should scroll both horizontally and vertically

   if the character(s) threaten to go off the screen out of the user's view.   ☐

BRIEF DESCRIPTION and COMMENTS:

II. **Additional marks** for:

- The character is animated when walking or jumping
  (that is, use of different sprites/textures for different motions); [ ]
- NPC's try to stop the player's character(s) from reaching its/their target; [ ]
- The character (s) can eliminate NPC's; [ ]
- Have character offspring which follows a main character
  (e.g.. SPROGS example); [ ]
- Have moving (transition) platforms to travel from one fixed
  platform to another at the same (or even adjacent) level(s). [ ]
- Sound [ ]
- Collision Response and physics [ ]
- Special effects, dynamic textures, particle systems [ ]
- More complex collision detection, e.g. GJK, BB hierarchies [ ]
- More advanced AI for NPC's [ ]
- Gravity [ ]
- More than one level [ ]
- A level editor [ ]
- Additional game information [ ]
- Anything else [ ]

COMMENTS:

III. **Marks deducted** for:

1. Unstable execution (e.g. game freezes or exits unexpectedly). ☐
2. Incorrect blending of textured polygons or sprites. ☐
3. Incorrect scrolling when vehicle/character reaches edge of viewport. ☐
4. No clear objective and scoring system ☐
5. Incorrect collision detection (objects do not collide at all or interpenetrate). ☐
6. Cluttered or overly complex game which is not playable by an 'average'
   player. ☐
7. Poorly implemented additional features as outlined in section II. ☐

COMMENTS:

Guidelines for marks:

<40 A game which has not added anything to the template programming code which was provided prior to the start of the coursework exercise and/or the majority of essential features as outlined in Section I are missing and/or the game has substantial flaws as outlined in Section III.

40-50 A game which has additional implementation as compared to the template program but a flawed game where one or more of the essential features are not present (Section I) or having a number of flaws as outlined in Section III.

50-60 Additional implementation as compared to the template program but with minor shortcomings (either some essential features are missing – Section I – or there are flaws as outlined in Section III) which result in a non-fully functional game.

60-70 A functional game with all essential features (Section I) present and no flaws (Section III) but with low weighted or no additional features as outlined in Section II.

70-85 A fully functional game with all essential features, no flaws and a good number of extra (higher weighted) features as outlined in Section II.

85+ A stellar game with all essential features, no flaws and a substantial number of additional (high weighted) features as outlined in Section II.

MARK based on criteria:

REVISED MARK after discussion between markers and rank-ordered.: