Faculty of Science and Technology

2018/2019

Assignment Brief		
Course/s: BSc (Hons) Games Design	**Unit Name:** Interface Design	
	Unit Level: Level 5	
Assignment set by: Vedad Hulusic	**QA:** Fred Charles	
Assignment Issued: TBA	**Recommended time to complete this assignment:** 30 hours	
Date Due: Monday 21st Jan 2019	**Unit Weighting:** 60%	**Assignment number:** 2
SUBMISSION METHOD(S) Assignment is to be electronically submitted by 12:30pm on the due date (please allow sufficient time to upload files before the deadline) via Large File Submission Link on Brightspace.		

The Assessment Task:

For this assignment you are expected to deliver a fully functional simple PC game with a comprehensive GUI, implemented in Unity (**lab version**) (3D project), based on your prototype from the first assignment. The game should be seamlessly playable and fully functional, with the focus on a well-designed GUI based on the HCI principles and theories.

The game should have a large **level** (city, forest, room for a small character – *Toy Story*-like, or similar) with various static **objects** (buildings, trees, furniture, other props) and **collectables**. The **player character** should be **animated** with at least two states: idle and walk/run, and controlled using **NavMesh**. The GUI must include at least the three elements described below: the main/end menu(s), the HUD and the popup window(s).

The game task is to gain as many points within given time. You gain points by collecting collectables and visiting defined places, and lose them by making (unnecessary) steps. There are three standard collectables PLUS the "Surprise" one which, when collided with, opens a popup window. If *Pick* is selected, it will randomly either add to or subtract from the score (e.g. 50 points).

The assignment is based on Assignment 1. The game should be extended by **adding** audio and camera animation/control and **implementing** the proposed GUI in Unity with its full functionality.

Important notes:

1. ***Game level will not be assessed based on the assets (quality) used, but on the asset integration, so DO NOT spend time on modelling own assets for the game.***
2. ***The GUI design should follow the Human-Computer Interaction (HCI) principles and theories discussed during the lectures.***
3. ***You are allowed to make any improvements of both the game and the GUI you submitted for Assignment 1.***

The game and the GUI must include **all the following features/elements**:

1. **MAIN GAME (implemented in Unity)**
   - A reasonably large level to fit the collectables and places to visit
   - An animated player character
   - A functional NavMesh (supporting seamless user navigation)
   - Background music,
   - Audio effects (walking, collecting items, visiting places, etc.),
   - Animated or controlled camera following the player
2. **GUI (implemented in Unity)**
   - **Main menu**
     - Enter (and autosave) user name
     - Select a character (1 out of 3)
   - **End menu** (health == 0)
     - At least Quit and Replay buttons, Score and High Score (with Player's name)
   - **HUD** - Tracking various player/game states
     - Health (Health is decreasing with time)
     - Steps (e.g. two steps per second while moving)
     - Collected items (Item 1: x; Item 2: y; Item 3: z)
     - Visited places (list, not just a number)
     - Points***** = CollectedItems*10 + VisitedPlaces*100 - Steps
   - **Popup menu**** (on "Surprise" item collection) with actions for the collectable:
     - Pick (randomly either add X points OR remove X points with an overlay message "You won X points" OR "You lost X points" respectively), X is a number, e.g. 50
     - Drop (leave the item and continue)
     - Examine (Display the item with its description in the same or a new popup window)

Points cannot go below zero. You can use other point calculation formula.

****Popup menu opens only for the "*Surprise*" collectables. While the popup is on, the counter is paused.***

GUI should be implemented for a Desktop build (PC game) so it optimally adjusts, i.e. positions and (re)scales its elements, to following resolutions:

- 1920 x 1080px
- 1280 x 800px
- 2048 x 1536px

Along with the game in Unity, as a part of the assignment you need to produce a **Video Demo.**

A **video demo** must have a voiceover justifying your motivation, idea, design decisions (level, props, collectables, etc.), implementation choices and analysing your game's and GUI's weaknesses and strengths. In addition to the GUI prototype description, it should include the description and discussion on the main aspects of the GUI implementation. It should also show the game running starting with the main menu and ending with the score/end screen, including the quit and replay buttons, and both score and high score (with the player name). Finally, the video should be concluded with an insight into limitations and potential improvements.

The Deliverables:
You must submit the following items for assessment:

You should submit to Brightspace an archive file (7z, zip, rar) containing:

- All relevant Unity assets, scripts and shaders required for building the project. This would usually be the Assets and ProjectSettings subfolders within the Unity project directory.*
  Try to keep the submission minimal.

- A ***hidden*** folder .git from your repository

- **Demo video** as described above, not more than 1280x720 resolution, showing and describing all the game features and GUI elements. Encode the video using h.264 or h.265, use an MP4 container. If embedding an audio narrative, compress with AAC. Do not submit an uncompressed video file.

**Not including the files/folders listed in .gitignore file is the best option (e.g. Library, Temp, etc.).*

Mark Distribution

Element	Contribution.
Game	70%
Video Demo	30%

The Submission Deadline(s):
You must submit your work by the following deadline:

12:30pm on Monday 21st January 2019

The Marking Scheme:

Your assignment will be assessed using the following mark scheme criteria:

Game (Unity project)	**70%**
Menus design/Unity integration	10%
Menus functionality/Unity implementation	15%
HUD design/Unity integration	15%
HUD functionality/Unity implementation	20%
Overall game and GUI functionality (on multiple resolutions) and UX	10%

Video demo	**30%**
Size and encoding	5%
Showcasing the game GUI	10%
Description of GUI implementation	10%
Critical analysis	5%

The Learning Outcomes:

This assignment will assess the following ILOs

1. Employ key Human-Computer Interaction (HCI) principles and theories;
2. Demonstrate knowledge of the theory behind designing and creating game interfaces for a range of platforms;
3. Show skills in designing an interface for an existing game, and express this design and its core decisions clearly;
4. Express skills for constructing a properly structured design document for interfaces;
5. Identify current and future trends in multimodal interaction design.

Confirmation that this assignment assesses the relevant ILOs: **Yes**

ALL Written assignments must be submitted before 12:30pm on the date due.

Electronic submission time will be 12:30pm on the due date following the above assignment detail, note this deadline is the time for the upload of the assignment to be completed, you are advised to begin submission AT LEAST 1 hour before.

For submission of hard copies (where required) the assignments submission room is on the first floor of Christchurch House, in the corridor near C114. Assignments must be submitted here before 12:30pm

Please note that as per the Standard Assessment Regulations any coursework submitted within 72 hours after the deadline, the maximum mark that can be awarded is 40%. If coursework is submitted more than 72 hours after the deadline, a mark of zero (0%) will be awarded

Capped assignments will be considered by the Board of Examiners and cannot be retrospectively uncapped by Academic Staff.

You must keep a copy of your assignment – the university will not take responsibility for lost assignment.

If you are unable to submit on time due to medical or other circumstances you MUST obtain an approved extension PRIOR to the submission deadline. Extension Request Forms are available from C237 or on the university website under Student Policies, Regulations and Procedures / Assessment then Mitigating Circumstances http://portal.bournemouth.ac.uk/C11/Mitigating%20Circumstances/default.aspx).

Plagiarism

Plagiarism is the act of copying the work or ideas of others without proper acknowledgement of this work.

Plagiarism also includes self-plagiarism or duplication: the inclusion in coursework, or a dissertation, or project, of any material which is identical or substantially similar to material which has already been submitted for any other individual assessment within the University or elsewhere.

Avoiding plagiarism is best achieved through the use of proper academic referencing and minimising direct quotations (i.e. re-write others' ideas in your own words, but still provide the reference of where these ideas came from).

Further information can be found here:

http://www.bournemouth.ac.uk/library/how-to/plagiarism.html

and

http://www.bournemouth.ac.uk/library/how-to/academic-offences.html

STUDENT FEEDBACK TEMPLATE

Unit:	**Interface Design**	**Name :**	
Level :	**5**	**Mark:**	
Assignment No:	**2**	**Marker :**	**Vedad Hulusic**
Hand in date:	**21/01/2019**	**Q A :**	**Fred Charles**
Dyslexia Marking Guidelines to be used :			

Lecturer Feedback

S1: Game (Unity project) – 70 marks

Criterion	**Mark**
Menus design/Unity integration	**0 / 10**
Menus functionality/Unity implementation	**0 / 15**
HUD design/Unity integration	**0 / 15**
HUD functionality/Unity implementation	**0 / 20**
Overall game and GUI functionality (on multiple resolutions) and UX	**0 / 10**
S1 Mark Awarded	**0 / 70**

Game Summary Comments:

S2: Video Demo – 30 marks

Criterion	**Mark**
Size and encoding	**0 / 5**
Showcasing the game GUI	**0 / 10**
Description of GUI implementation	**0 / 10**
Critical analysis	**0 / 5**
S2 Mark Awarded	**0 / 30**

Video Demo Summary Comment:

SUMMARY FEEDBACK COMMENT:

3 Feed Forward Suggestions:

(i)

(ii)

(iii)

Summary of Marks	
S1: Game (out of 70)	**0**
S2: Video Demo (out of 30)	**0**
Total Assignment Mark (out of 100)	**0**
Degree Classification:	**Fail/3rd/2:2:/2:1/1st**

SIGNED (Marker): Date: