Mobile Interactive Systems Demo Sheet

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App Title: SpaceShooter2D

App Description:

The application is a simple two-dimensional space shooting game. The user can play the game indefinitely and create high-scores which will be saved in the shared preferences.

Gameplay: Use your fingers and touch the upper or lower part of the screen’s left half to move the ship. Shoot by pressing anywhere on the right half of the screen. Destroy as many enemy ships as possible and survive long enough to beat the high-score. Initially, the player starts off with two lives and after getting hit the first time has a two second time frame in which the ship is immune to hits.

Key Features:

* Graphics
* Audio
* Simple game engine incl. physics

Other Features

* Persistence: Database and shared preferences
* Sensor Input: Vibration and Accelerometer
* Wireless Connectivity: Any gamepad, joystick or D-Pad via Bluetooth
* Handling audio and video

What have you done which addresses the following:

* Design: After prototyping how the individual menus should look like they were created having simplicity in mind. Many users become confused if there are too many options to choose from.
* User testing: I asked friends and neighbours to test the application. The game was tested on three different devices with success and no issues.
* Adapting to different devices: The layouts have got a “weight” attribute to determine how much of the screen space they will cover. Through this method the layout looks approximately the same on different resolutions.

Did you use any external resources such as code, multimedia, text…etc?

Yes, all multimedia used in the project are from the public domain.

List of external multimedia:

* The ships and laser sprites along with the sound effects were from the following website: <https://kenney.nl/assets/space-shooter-redux>
* All title images were created using the “spaced out” theme from the following website: <https://de.cooltext.com/Logo-Design-Spaced-Out>
* Background images were found on: <https://pixabay.com/de/>
* The application icon was created using the application “Iconion”
* Ambient music by frankum: <https://freesound.org/people/frankum/>
* Font: <https://www.1001freefonts.com/>
* Chart: <https://www.draw.io>

Is your application creative? Why and how?

Most of the games created nowadays, make use of available game engines. This application provides everything from scratch and only accesses the android utilities. Furthermore, providing support for Bluetooth game controllers improved the playability and usability of the application. Although the main concept is not new, some game features are creative e.g. the rapid fire of lasers when many ships are close to the player ship.