

Title: Atomix for Microsoft Kinect for Windows

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Abstract: The aim of this master thesis is to explore the capabilities of the motion sensing device Kinect by Microsoft and then implement Atomix game that will use natural user interface provided by the Kinect sensor. This thesis describes discovered capabilities and limitations of the sensor and proposes suitable gestures for natural user interface of the Atomix game with respect to the capabilities of the sensor. The resulting game is implemented using the XNA Framework library. Aside from the Atomix game is created an application for creating custom levels. Moreover this thesis also implements independent libraries containing classes for managing the connected Kinect sensors and components for XNA Framework that can be used in other application or games.

Keywords: atomix, kinect, xna