**Functional**

**Input**

*FN-IN-01: The system should support the use of the W A S and D keys to turn Paku Paku.*

*FN-IN-02: The system should support the use of the arrow keys to turn Paku Paku.*

*FN-IN-03: The system should support the use of the 2 4 6 and 8 keys on the numpad to turn Paku Paku.*

*FN-IN-04: The system should support the use of a joystick to turn Paku Paku.*

*FN-IN-05: The system should allow the user to start a new game by pressing the enter key on the main menu screen.*

*FN-IN-06: The system should allow the user to exit the game by pressing the escape key on the main menu page.*

**Output**

*FN-OUT-01: The system should redraw Paku Paku’s sprite in the direction that the user last entered.*

**System**

*FN-SYS-01: The system should use an internal timer to control movement.*

*FN-SYS-02: The system should automatically speed up the timer upon the completion of a level until level 21 of the game.*

*FN-SYS-03: The system should automatically move the characters in the direction they are facing when the time designated by the level is reached on the timer.*

*FN-SYS-04: The system should allow Paku Paku to turn in any direction when the input is given.*

*FN-SYS-05: The system should not allow Paku Paku to move on or through wall tiles.*

*FN-SYS-06: The system should allow Paku Paku to warp to the opposite side of the map when Paku Paku reaches the end of the tunnel in the center.*

*FN-SYS-07: The system should not allow the ghosts in their normal state to turn the opposite direction that they are currently moving.*

*FN-SYS-08: The system should set the ghosts currently on the stage that are not consumed to fleeing upon Paku Paku consuming a super pellet.*

*FN-SYS-08: The system should reverse the current direction of the ghosts when Paku Paku consumes a super pellet.*

*FN-SYS-09: The system should allow Paku Paku to consume the ghosts for points.*

*FN-SYS-10: The system should calculate the ghost’s points as 200 times the amount of ghosts consumed, with a point cap at 6400 per ghost.*

*FN-SYS-11: The system should reset the ghost’s points to 200 upon Paku Paku exiting super mode.*

*FN-SYS-12: The system should remove Paku Paku from super mode upon clearing a level.*

*FN-SYS-13: The system should not make the ghosts in jail consumable when a super pellet is consumed.*

*FN-SYS-14: The system should award 10 points to the user when a regular pellet is consumed.*

*FN-SYS-15: The system should award 100 points to the user when cherries are consumed.*

*FN-SYS-16: The system should award 300 points to the user when a strawberry is consumed.*

*FN-SYS-17: The system should award 500 points to the user when an orange is consumed.*

*FN-SYS-18: The system should award 700 points to the user when a bell is consumed.*

*FN-SYS-19: The system should award 1000 points to the user when an apple is consumed.*

*FN-SYS-20: The system should award 2000 points to the user when a melon is consumed.*

*FN-SYS-21: The system should award 3000 points to the user when a Galaxian is consumed.*

*FN-SYS-22: The system should award 5000 points to the user when a key is consumed.*

*FN-SYS-23: The system should award 50 points to the user when a super pellet is consumed.*

**Non-Functional**

**Input**

**Output**

*NF-OUT-01: The system should output sound using the MIDI sound format.*

*NF-OUT-02: The system should detect if the computer running the system cannot support sound output.*

*NF-OUT-03: The system should produce no sounds if the computer running the system cannot support the sound type.*

*NF-OUT-04: The system should support VGA video output type using the BIOS scanline set.*

*NF-OUT-05: The system should support the EGA video output type.*

**System**

*NF-SYS-01: The system should run with a maximum RAM of 128k*

*NF-SYS-02: The system should run on an Intel 8088 processer that at least runs at 4.77 mhz.*

*NF-SYS-03: The system should run on Windows DOS 2.11 or higher.*