

Massachusetts Institute of Technology
Department of Electrical Engineering and Computer Science
6.111 - Introductory Digital Systems Laboratory

Final Project Check Off Sheet

Project Title: Enhanced DDR

Student Names: Sharmeen Browarek, Anna Ayuso

TA Name: Jae Lee

TA Signature/Date:

Design

State transition diagrams, Block Diagrams, Code

Functionality

Screen shot of game mode (Sharmeen)

Screen shot of menu mode (Sharmeen)

Screen shot of report card mode (Sharmeen)

Arrow ascend the screen vertically in game mode (Sharmeen)

A dynamic, dancing beaver is displayed in game mode (Sharmeen)

Song starts when user selects difficulty level (Anna)

Beats of the song match the arrows hitting the top of the screen (Anna)

User is able to reset game at any time (Anna)

User is able to select arrows with IR sensors (Anna)

Game transitions from menu mode to game mode to report card mode (Anna)

User is able to select arrows with FPGA push buttons

Game fails if the user misses too many arrows

- Score is given in the report card mode that matches the user's performance
- Game mode screen will continue to update the accuracy bar during the game
- System rates the performance of the user based on the proximity of the arrows to the goal and the coordination of the user's footwork.