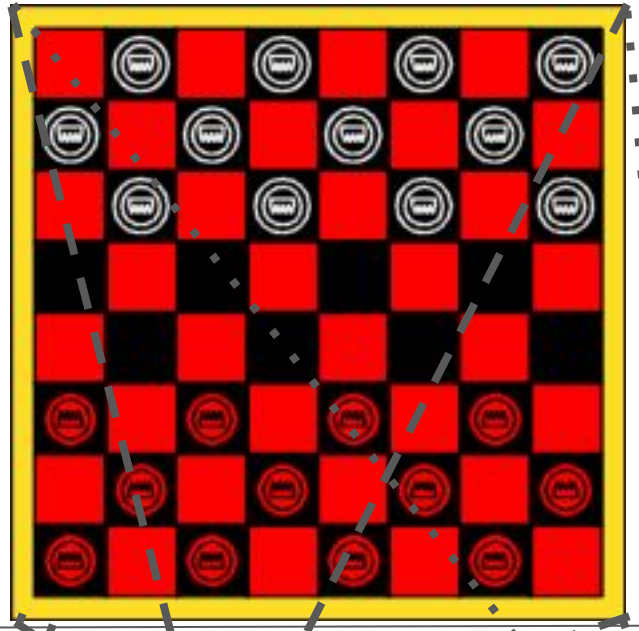


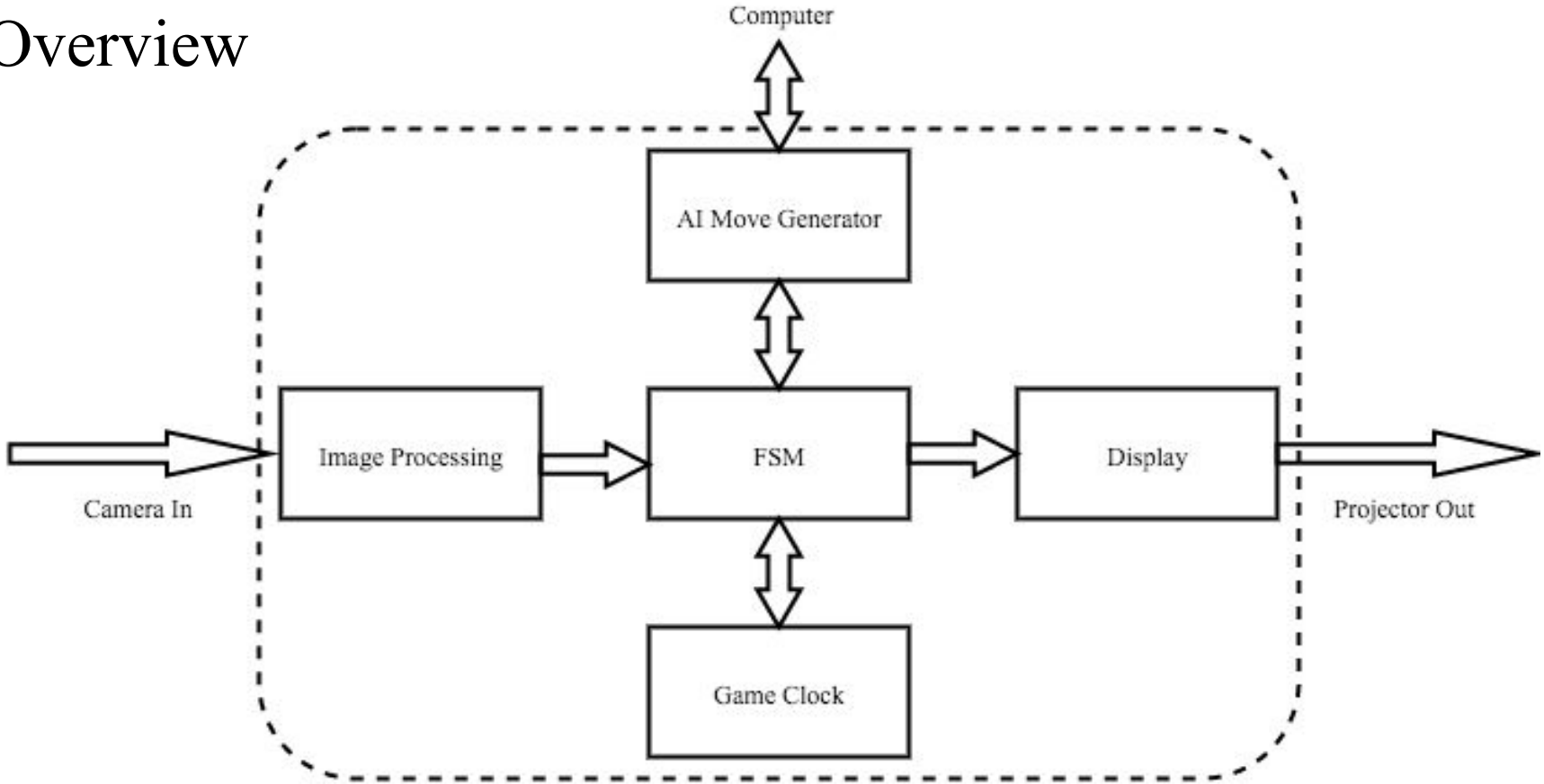
Interactive 1 Player Checkers

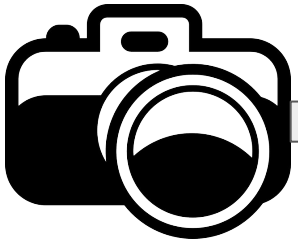
Amelia Becker & Harrison Okun

6.111

Fall 2015

Overview

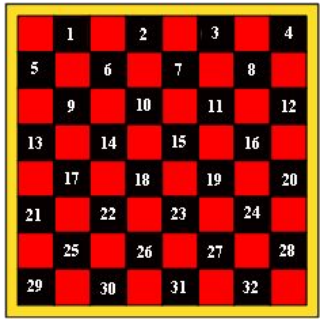

Computer
AI Move Generator
Image Processing
FSM
Display
Camera In
Projector Out
Game Clock



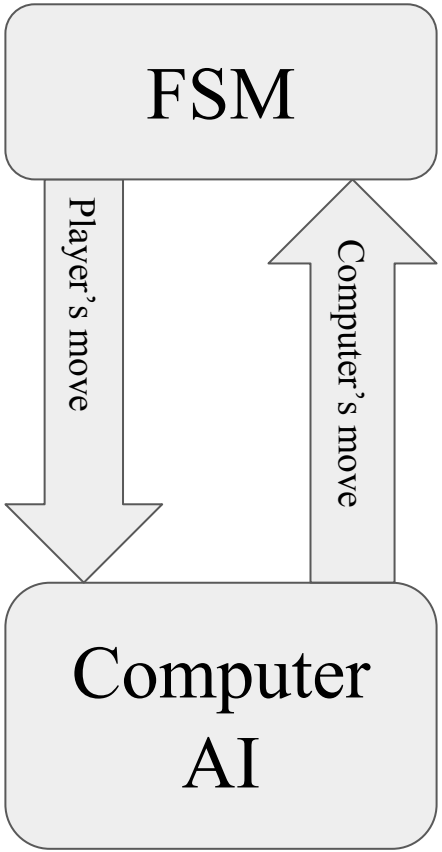
Raw Image

Image Processing

Board Configuration

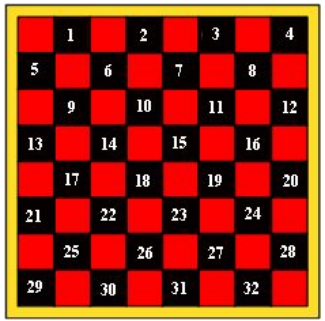


FSM


FSM
Player's move
Computer's move
Computer AI

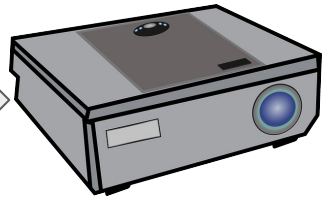
FSM

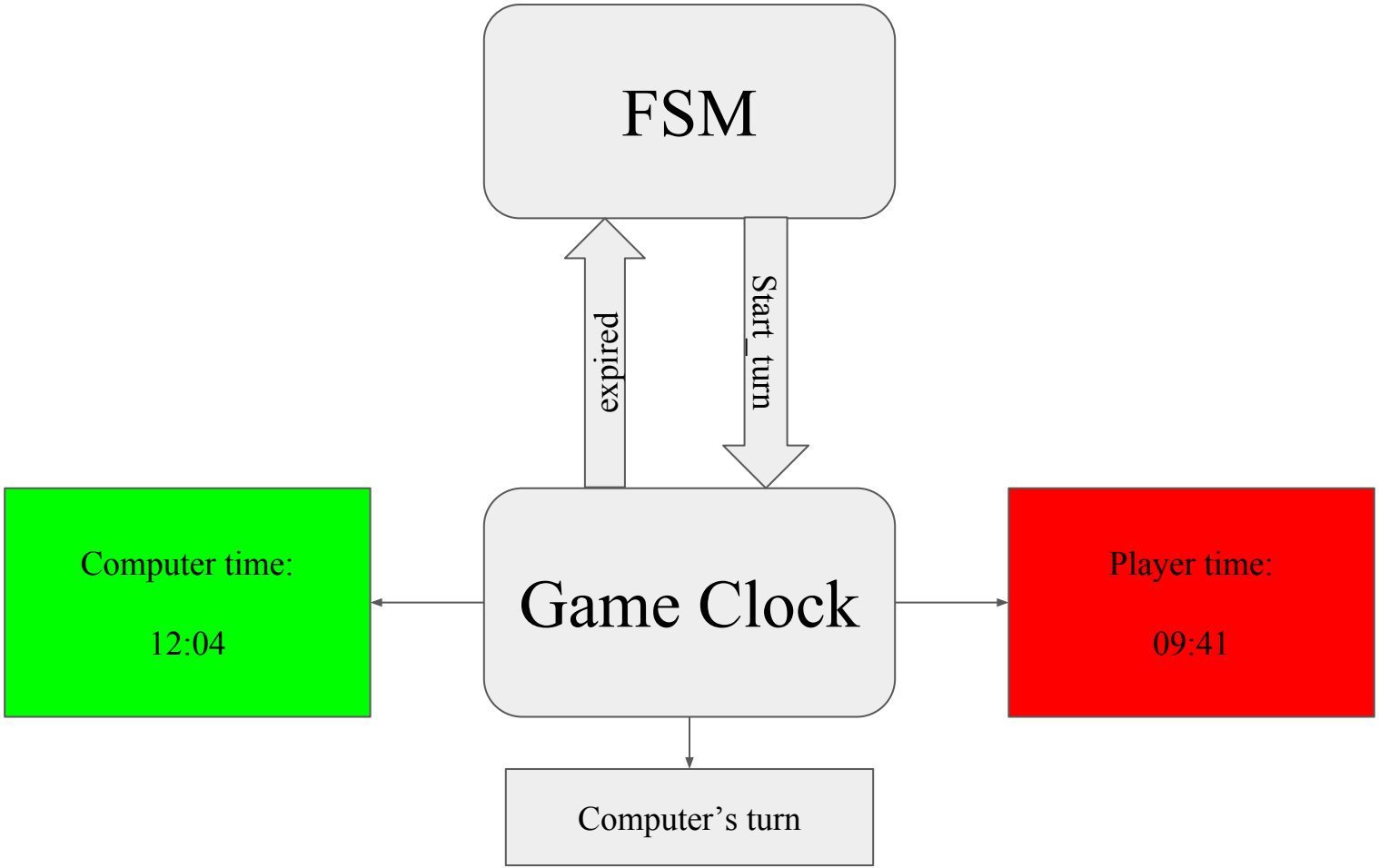
Board Configuration

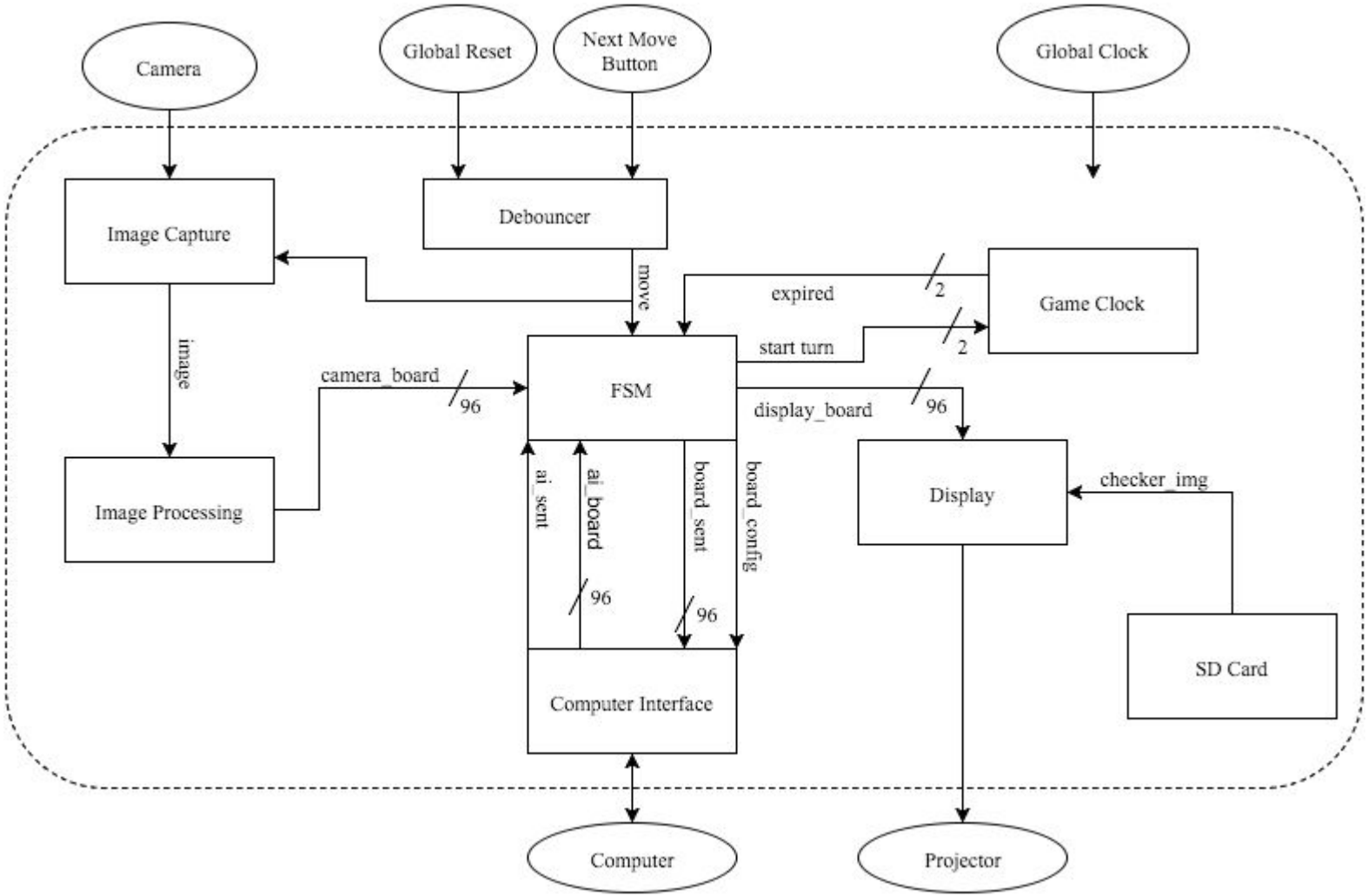


Display

Image

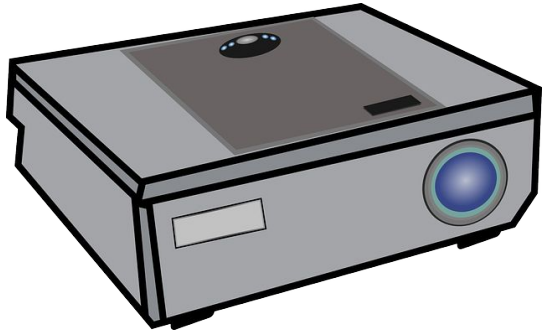


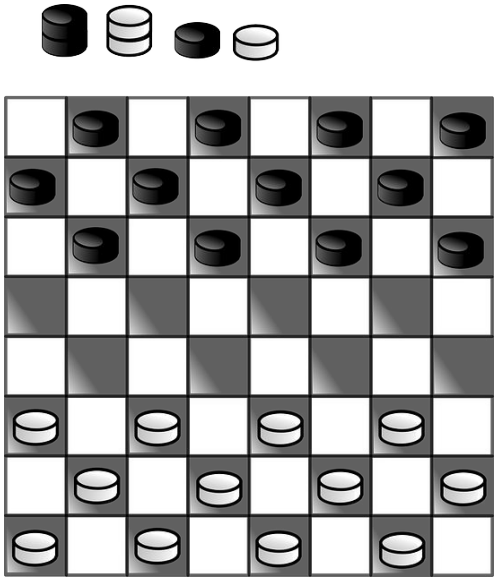

FSM
expired
Start_turn
Computer time:
12:04
Game Clock
Player time:
09:41
Computer’s turn

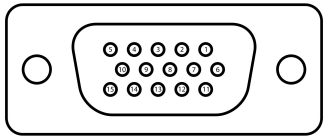

Camera
Global Reset
Next Move Button
Global Clock
Image Capture
Debouncer
move
expired
2
Game Clock
start turn
2
image
camera_board
96
FSM
display_board
96
Image Processing
ai_sent
ai_board
96
board_sent
96
board_config
Display
checker_img
SD Card
Computer Interface
Computer
Projector

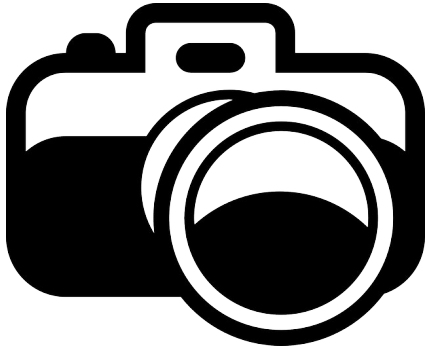
Week	Harrison	Amelia	Both	Deliverables
11/2			Presentation materials, Global modules	Proposal draft (11/3 5PM), Presentation rehearsal (11/5 11AM)
11/9	Computer AI Logic module	Image capture module		Presentation (11/10 2:30-5:00PM), Proposal Revision (11/13 5PM)
11/16	Display logic module, Test: AI module	Image processing module, Test: Image capture module		Checkoff checklist meeting
11/23	Game FSM module, Test: Display logic	Projection and camera setup and calibration, Test: Image processing		
11/30			Full testing, optional developments	Status update with mentor
12/7				Final project checkoff (12/7 4-9PM), Project demos (12/8 6-11PM), Final project report (12/9 5PM)

Resources



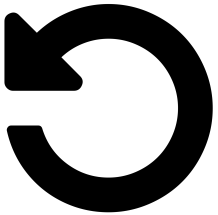






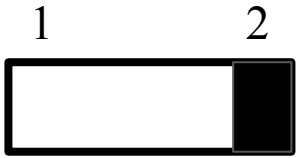
Stretch Goals

Undo feature



Next Move button and computer projection

First or Second Move



Questions?