Team/Project	xxx / Bowling Alley

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1. Register a patron for Control Desk class

1.1. One person who is not yet in the database registers

Instructions
Ask for bowler's name.
Ask for bowler's e-mail address.
Ask bowler for a unique nickname.
Check to make sure nickname is not already in the database
If it is then ask bowler for new nickname

Acceptance Criteria
Bowler is now in database.

2. Checking in with system

2.1. Party wants to check in

Instructions

Bowler provides their unique nickname.

Add bowler to new Party object.

Repeat until entire party has registered.

Control desk adds party to the waiting list.

Acceptance Criteria

Party is on the waiting list which is a queue contained in Control Desk

3. Assigning a party to a lane

3.1. A party is on the waiting list

Instructions

Wait for an open lane.

When a lane opens, assign the party to the lane. Take party off of waiting list.
Acceptance Criteria
Party is no longer on waiting list. Party is at the specified lane.
4. A maintenance call is made to control desk
4.1 If a mechanical error occurs, the party will push the maintenance button
Instructions
All lane functions will pause Status indicator on control desk will change to red Control Desk operator will manually fix the problem Control Desk Operator will change status back to green
Acceptance Criteria
Lane functions resume
5. Handling Fouls
5.1 A foul is committed
Instructions
If a bowler commits a foul, Pinsetter will know about it Pinsetter sends an event saying a foul has been committed
Acceptance Criteria
Lane View shows a foul has been committed by showing an "F"
6. Changes in Pinsetter
6.1 Pinsetter Sends an Event

Instructions
Pinsetter sends a pinSetterEvent
Acceptance Criteria
All subscribers to PinSetter are updated
6.2 Pinsetter resets
Instructions
Pinsetter receives a reset command from lane Pinsetter sends an event.
Acceptance Criteria
Pinsetter view resets Lane updates
6.3 Pinsetter view receives an event
Instructions
Pinsetter sends an event
Acceptance Criteria
Pinsetter view updates accordingly
6.4 Pinsetter has cycled twice
Instructions
Lane sends event to pinsetter indicating the second roll has been made
Acceptance Criteria
Pinsetter resets and sends an event to it's subscribers
Pinsetter view has reset
Lane has updated
7. Changes in Lane and Lane Events
7.1 Party is ready to Bowl

Instructions
Lane is assigned a party by control desk
Acceptance Criteria
Scoreboard is initialized with the bowler's nicknames
Frame 1, Roll 1, First bowler's turn
7.2 User's turn to bowl
Instructions
LaneView displays user's nickname
Lane sends an event saying the bowler has bowled
Acceptance Criteria
Pinsetter returns the number of pins knocked down
Pinsetter has cycled once
8. Special cases on the last frame.
8.1 Strike on the tenth frame.
Instructions
Allow bowler 2 more rolls of the ball
Total the points earned
Acceptance Criteria
Point value of last frame is the total of the 3 rolls plus the current score.
8.2 Spare on the tenth frame.
Instructions
Allow bowler 1 more roll
Total the points earned
Acceptance Criteria
Point value of last frame is the total of the 3 rolls plus the current score.

9. Game is over
9.1. Last bowler in a party of multiple bowlers finishes, party leaves lane
Instructions Send individual score reports. Ask party if they want to bowl again. When party answers "No", generate end of game report for each bowler.
Acceptance Criteria Lane is now open. ScoreReport object has been created Email has been sent to the bowler's e-mail address.
9.2. Party is bowling again
Instructions Send score reports. Ask party if they want to bowl again.
Acceptance Criteria
Party is still at lane.
New game: Frame 1; scores set to 0.