

## Unit Tests

Wagon class unit tests are included on `test.js`.

To run the test suite on terminal,

```
`node test.js`
```

```
Begin test.js suite
```

```
#1: Test wagon creation
#2: Test filling up to capacity
#3: Test restricting new entrants on full wagons
#4: Test removing existing riders from wagon
#5: Test removing non-existing riders from wagon
#6: Test redacted wagons has spot for new rider
#7: Test add message for each existing rider
```

```
All Tests finished!
Total passed: 7
```

## System Tests

System tests are not automated, but server and client logs are included to report state, behavior, and errors. Sample procedures are provided to recreate these states.

### Connect success

On client terminal,

```
`node chatclient.js localhost 8080 Mallard`
```

```
[CONNECTION] Rider Mallard connected to the server from 127.0.0.1:38650.
```

### Connect fail

On client terminal, enter the wrong hostname or port

```
`node chatclient.js localhost 8081 Mallard`
```

```
Error connecting to Server on host: localhost port: 8081
Error: connect ECONNREFUSED 127.0.0.1:8081
    at TCPConnectWrap.afterConnect [as oncomplete] (node:net:1187:16) {
  errno: -111,
  code: 'ECONNREFUSED',
  syscall: 'connect',
  address: '127.0.0.1',
  port: 8081
}
```

### Create success

On client Lobby,

```
>> create myNewRoom
```

```
[CREATE] Wagon myNewRoom is created.
```

### Create reject

On client Lobby,

```
>> create unique
```

```
>> create unique
```

```
>> create unique
```

```
Create failed. Wagon name already exists.
```

### Join success

On client Lobby,

```
>> join myNewRoom
```

```
[JOIN] Rider Mallard (127.0.0.1:38654) hopped on myNewRoom.
```

### Join fail

On client Lobby,

```
>> join thisRoomDNE
```

```
>> join thisRoomDNE
```

```
Join failed. Wagon does not exist.
```

### Force exit Wagon cleanup

On client Lobby,

```
>> join myNewRoom
```

On myNewRoom Wagon, type this keyboard combination to force quit

```
Ctrl + C
```

```
[LEAVE] Rider Mallard (127.0.0.1:38654) is removed from myNewRoom.
```

```
[CONNECTION] Rider Mallard (127.0.0.1:38654) is disconnected from server.
```

### Proper exit disconnect

On client Lobby,

```
>> exit
```

```
[CONNECTION] Rider Mallard (127.0.0.1:38654) is disconnected from server.
```