

**TEST ONE:** “Adding 5 songs to a queue with max 5”

**Input:** 5 songs called song0, song1, song2, song3, song 4

**Expected output:** a queue displaying 5 songs with equal total votes

**Why:** the queue is set to a max of 5, therefore 5 songs can be successfully added

**Actual output:**

```
name0: id(0) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(0)
name4: id(4) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(0)
name3: id(3) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(0)
name2: id(2) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(0)
name1: id(1) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(0)
```

SUCCESS

**TEST TWO:** “Attempting to add invalid genre”

**Input:** a song with the genre “Rock” into a queue that only accepts “Pop”

**Expected output:** a notification that the song was not added to the queue

**Why:** In the add song method, there is a conditional check for genre type

**Actual output:**

```
Request Failed: Genre (Rock) is not accepted in the queue
```

SUCCESS

**TEST THREE:** “Adding a 6th song to the queue”

**Input:** a song request object

**Expected output:** a notification that the song was not added to the queue

**Why:** In the add song method, there is a conditional check for if the queue is full

**Actual output:**

```
Request Failed: Queue is full
```

SUCCESS

**TEST FOUR:** “Removing one song”

**Input:** song4 into the remove method

**Expected output:** a queue containing songs song0, song1, song2, song3 in the same order as before

**Why:** When a song is removed, the queue is updated to remove it visibly

**Actual output:**

```
name0: id(0) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(0)
name3: id(3) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(0)
name2: id(2) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(0)
name1: id(1) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(0)
```

SUCCESS

**TEST FIVE:** “Removing someone else’s song”

**Input:** a clientIp into the remove method that does not match the clientIp of the song

**Expected output:** a notification of failure to remove song

**Why:** When a song is removed, the clientIps are compared to make sure the user is only removing their own song

**Actual output:**

You can only remove your own song

SUCCESS

**TEST SIX:** “Removing a song that is playing”

**Input:** a song that is currently playing into the remove method

**Expected output:** a notification of failure to remove song

**Why:** When a song is removed, a conditional check is made to make sure the song is not playing

**Actual output:**

You can not remove a song that is playing

SUCCESS

**TEST SEVEN:** “Adding a duplicate song”

**Input:** song2 into the add method

**Expected output:** a notification that the add failed

**Why:** Before adding the song to the queue, the add method checks if it already exists

**Actual output:**

Request Failed: Queue already contains name2

SUCCESS

**TEST EIGHT:** “Adding a song when queue is no longer accepting requests”

**Input:** a SongRequest object into the add method

**Expected output:** a notification that add failed

**Why:** Before a song is added to the queue, the add method checks if the host is still accepting song requests

**Actual output:**

```
Request Failed: Queue is no longer accepting requests
```

SUCCESS

**TEST NINE:** “Liking and disliking songs”

**Input:** liking song1 3 times, song2 and song3 once each, and disliking song0 once

**Expected output:** a queue that orders the songs based on their total vote score

**Why:** When a song is liked or disliked, its position in the queue is updated

**Actual output:**

```
name1: id(1) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(3)
name2: id(2) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(1)
name3: id(3) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(1)
name0: id(0) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(-1)
```

SUCCESS

**TEST TEN:** “Liking my own song”

**Input:** a user likes song4 that they also added

**Expected output:** a notification of failure that the user cannot like their own song

**Why:** a conditional statement exists in like/dislike that compares a clientIp with the voter and user who added the song

**Actual output:**

```
name1: id(1) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(3)
name3: id(3) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(1)
name2: id(2) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(1)
name4: id(4) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(0)
name0: id(0) artist(artist) album(album) genre(Pop) clientIp(clientIp) voteScore(-1)
```

**TEST ELEVEN:** “Playing all songs in the queue”

**Input:** playSong is called until the queue is empty

**Expected output:** An empty queue is displayed with all songs removed

**Why:** the playSong method will remove the song from the queue and return them so they can be played

**Actual output:**



RequestQueue

