

Summary of Feedback and Changes

As the design of Superior Shows progressed, we sought feedback at each stage of development in order to best meet the needs of the end users. This process affected everything from original schema design to the final user interface.

Our schema changed a few times throughout development in order to account for potential real-world situations that were prohibited by the original design. First we ensured that all necessary entities and attributes existed that might be needed to track business success and plan for future events. We then updated our event entity to allow for multiple performers per events and allowed artists to have no genre associated with them.

Once all entities were defined, we began to work on how the interface could interact with information from the database. This included ensuring that deleting a specified genre would not delete its associated performers but instead update their genre to NULL. We required certain fields to be entered during add and update queries so that necessary fields would have to be assigned.

We took care in implementing a user-friendly interface that would help users understand functionality quickly and would reduce potential error while interacting with the data. To aid this, we included visual and text based cues to inform and educate users on all functions of the program. This included labels on non-straightforward data fields like drop downs and a key for icons used for update and delete functions. Additionally, when a user chooses to edit an entity, the fields are pre populated on the edit page such that the user does not accidentally enter new information. For fields that are associated with foreign keys, the user is only presented with options that are currently available in the database. The keys are displayed as their text value to allow for quick and accurate assignment.

We integrated warning messages for cancel operations in critical functions such as update and delete to warn the user of potential unwanted changes to the database. This ensures that data integrity is maintained and less likely to be altered in error.

Finally, we added a feature to the events page that allows the user to quickly view all attendees currently registered for that specific event.

The final product we delivered to our user allows for creation, insertion, edits, and deletion of data from all entities!

Project Outline

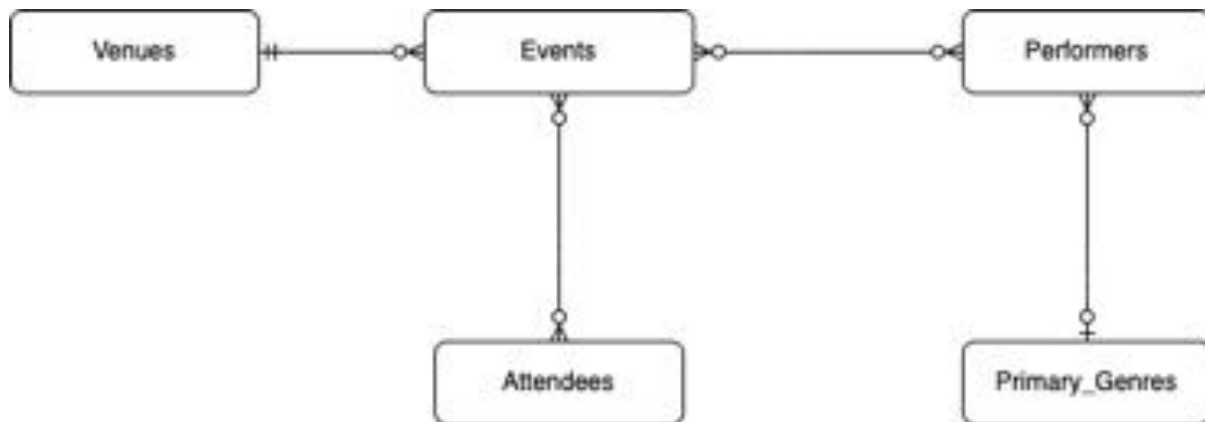
Superior Shows is a live events collaborative that schedules comedy, music, live podcasts and more. It has 6 different venues located along the shores of Lake Superior. The venues have different capacities ranging from 50 to 400 that together schedule around 125 events per month. Previously, Superior Shows had been using a bulky excel sheet document and a separate calendar application to accomplish these tasks. This prevented them from being able to use the data in a meaningful way beyond holding their events. A database driven website will record *Performers* and *Attendees* of *Events* at all *Venues*. The new database will be able to relate information such as which Genres are best attended at which Venues, or which Performers result in highest revenues compared to cost, so that scheduling decisions can be informed by data collected at previous shows. Overall it will be used by Superior Shows management to aid in decisions about what shows to book and what attendees to target with marketing efforts.

Database Outline

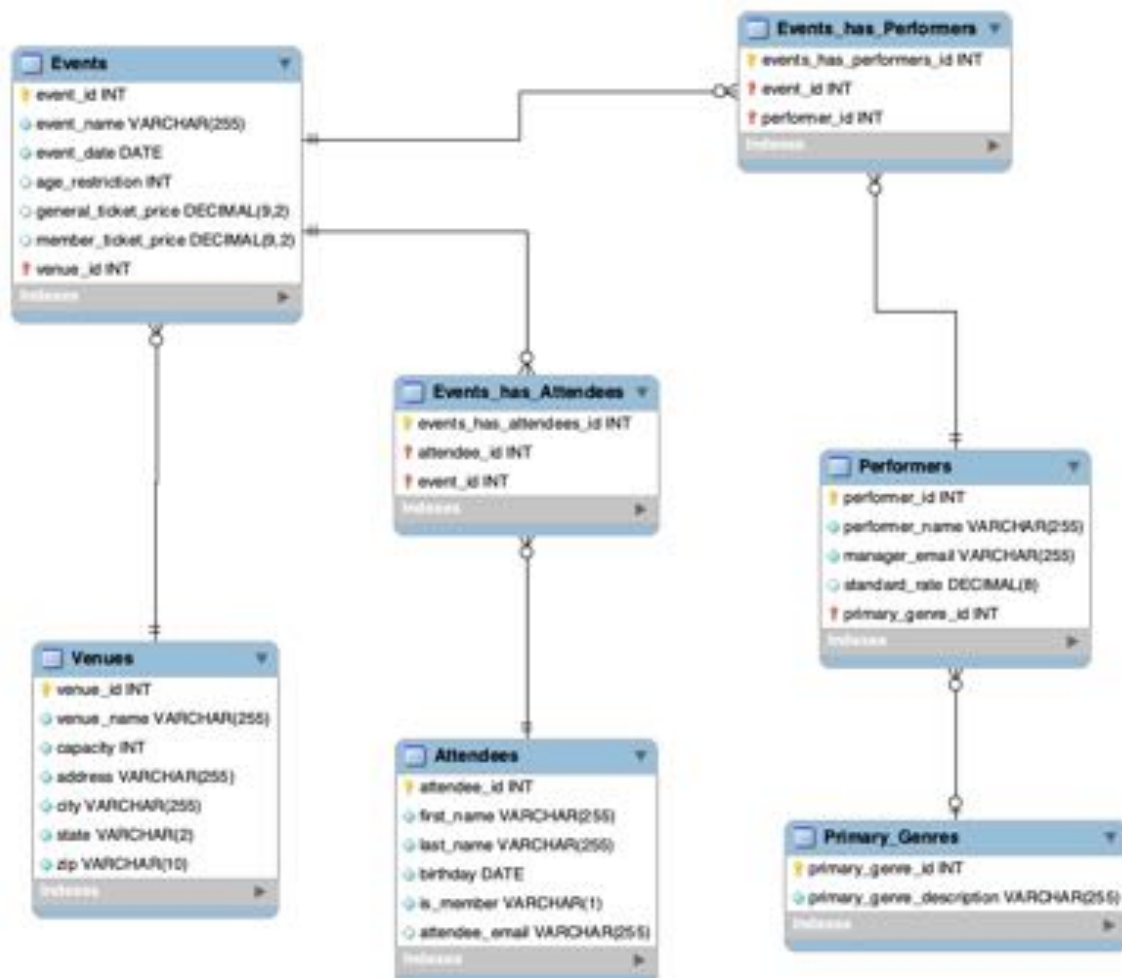
- Venues: records the details of the Venues where events can occur
 - venue_id: int, auto_increment, unique, not NULL, PK
 - venue_name: varchar, not NULL
 - capacity: int, not NULL
 - address: varchar, not NULL
 - city: varchar, not NULL
 - state: varchar, not NULL
 - zip: varchar, not NULL
 - Relationship: a 0:M relationship between Venues and Events is implemented with venue_id as a FK inside Events
- Performers: details about past Performers, currently booked Performers, and potential Performers
 - performer_id: int, auto_increment, unique, not NULL, PK
 - performer_name: varchar, not NULL
 - manager_email: varchar, not NULL
 - standard_rate: dec
 - Relationship: M:N relationship between Performers and Events is implemented with an intersection table containing both performer_id and event_id
- Primary_Genres: style of event that the performer puts on
 - primary_genre_id: int, auto_increment, unique, not NULL, PK
 - primary_genre_description: varchar, not NULL

- Relationship: 1:M relationship between Genres and Performers is implemented with genre_id as a FK inside of Performers
- Events: all of the details about a given Event
 - event_id: int, auto_increment, unique, not NULL, PK
 - event_name: varchar, not NULL
 - event_date: date, not NULL
 - age_restriction: int
 - general_ticket_price: dec, not NULL
 - member_ticket_price: dec, not NULL
 - Relationship: a M:N relationship between Events and Attendees is implemented with an intersection table containing both attendee_id and event_id; a M:N relationship between Events and Performers is implemented with an intersection table containing both performer_id and event_id
- Attendees: details about people who attend events, attendees who are members receive special pricing and privileges at certain events
 - attendee_id: int, auto_increment, unique, not NULL, PK
 - first_name: varchar, not NULL
 - last_name: varchar, not NULL
 - birthday: date, not NULL
 - attendee_email: varchar
 - is_member: varchar, not NULL
 - Relationship: a M:N relationship between Attendees and Events is implemented with an intersection table containing both attendee_id and event_id

Entity-Relationship Diagram



Schema



Sample Data

VENUES ENTITY

VENUE_ID	VENUE_NAME	CAPACITY	ADDRESS	CITY	STATE	ZIP
1	Gun Flint Tavern	100	111 Wisconsin St	Grand Marais	MN	55604
2	Bayfront Festival Park	400	350 Harbor Drive	Duluth	MN	55802
3	Madeline Island Chamber Music	250	666 Mandamin Trail	La Pointe	WI	54850
4	Breakers Roadhouse	50	149 W Baraga Ave	Marquette	MI	49855

ATTENDEES ENTITY

ATTENDEE_ID	FIRST_NAME	LAST_NAME	BIRTHDAY	ATTENDEE_EMAIL	IS_MEMBER
1	Quinn	Smith	2009-03-16	NULL	I
2	Destiny	Jones	2000-07-07	destiny_j@cs340.com	A
3	Amar	Patil	1985-12-04	amar_patil@cs340.com	A
4	Natalia	Moreno	1972-05-23	natalia.r.moreno@cs340.com	A

PERFORMERS ENTITY

PERFORMER_ID	PERFORMER_NAME	MANAGER_EMAIL	STANDARD_RATE	PRIMARY_GENRE_ID
1	The New Salty Dogs	bookings@lokifuesday.com	1,200.00	2
2	Tig Notaro	contact@tignotaro.com	2,700.00	1
3	Trampled by Turtles	mgmt.contact@trampledbyturtles.com	6,000.00	2
4	Zenith City Horror	zenithcityhorror@duluthstuff.com	900.00	4

EVENTS ENTITY

EVENT_ID	EVENT_NAME	EVENT_DATE	AGE_RESTRICTION	GENERAL_TICKET_PRICE	MEMBER_TICKET_PRICE	VENUE_ID
1	Poetry Slam	2022-08-14	NULL	NULL	NULL	3
2	Drag Show	2021-01-01	18	16.50	14.99	4
3	Lakefront Concert	2020-07-03	21	56.00	43.75	2
4	Comedy Show	2021-02-14	21	5.00	0.00	1

PRIMARY GENRES ENTITY

PRIMARY_GENRE_ID	PRIMARY_GENRE_DESCRIPTION
1	Comedy
2	Music
3	Poetry
4	Theatre

EVENT HAS PERFORMERS

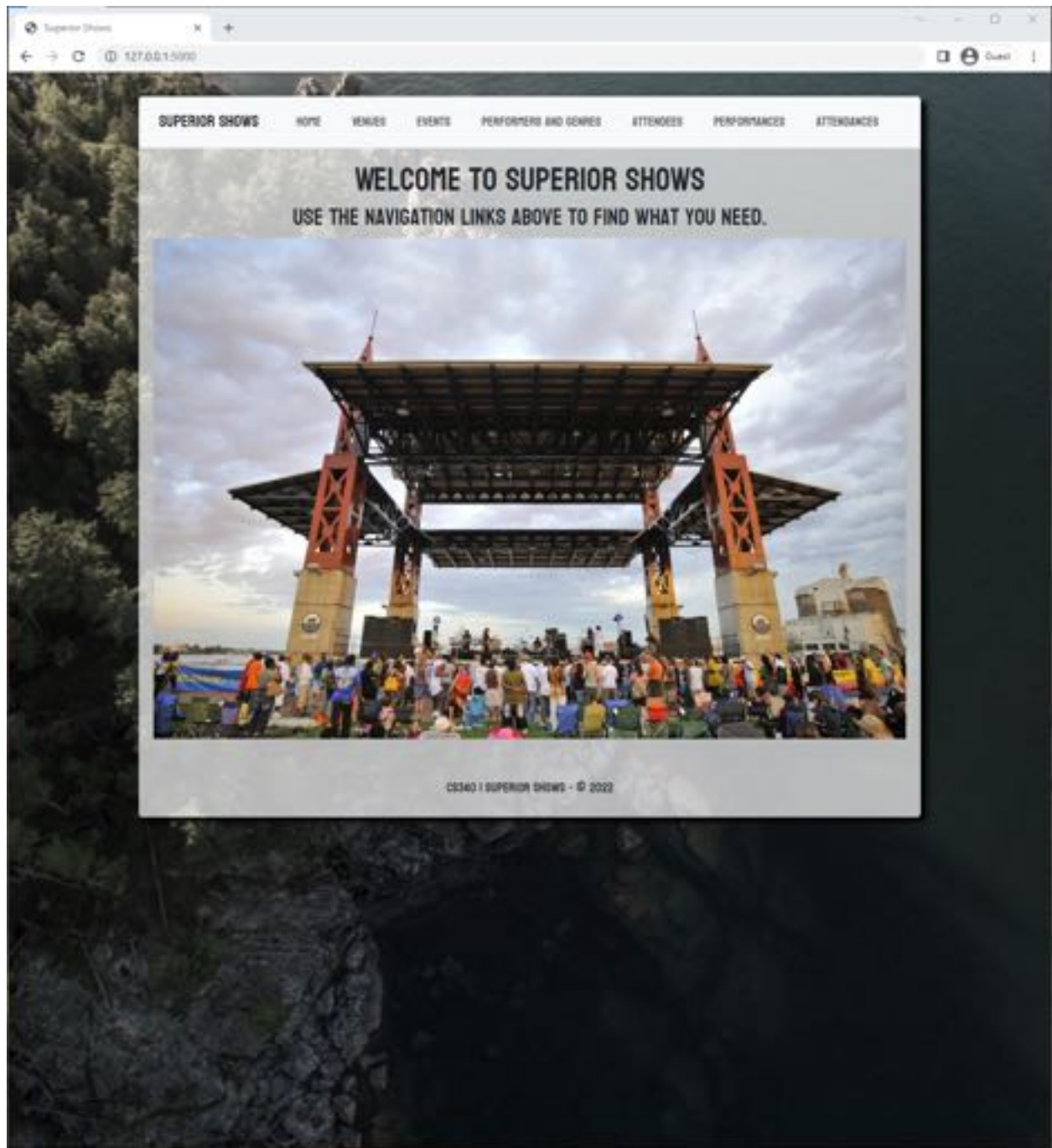
EVENTS_EVENT_ID	PERFORMER_ID
references Lakefront Concert	references The New Salty Dogs
references Lakefront Concert	references Tig Notaro
references Lakefront Concert	references Trampled by Turtles
references Comedy Show	references Zenith City Horror

EVENT HAS ATTENDEES

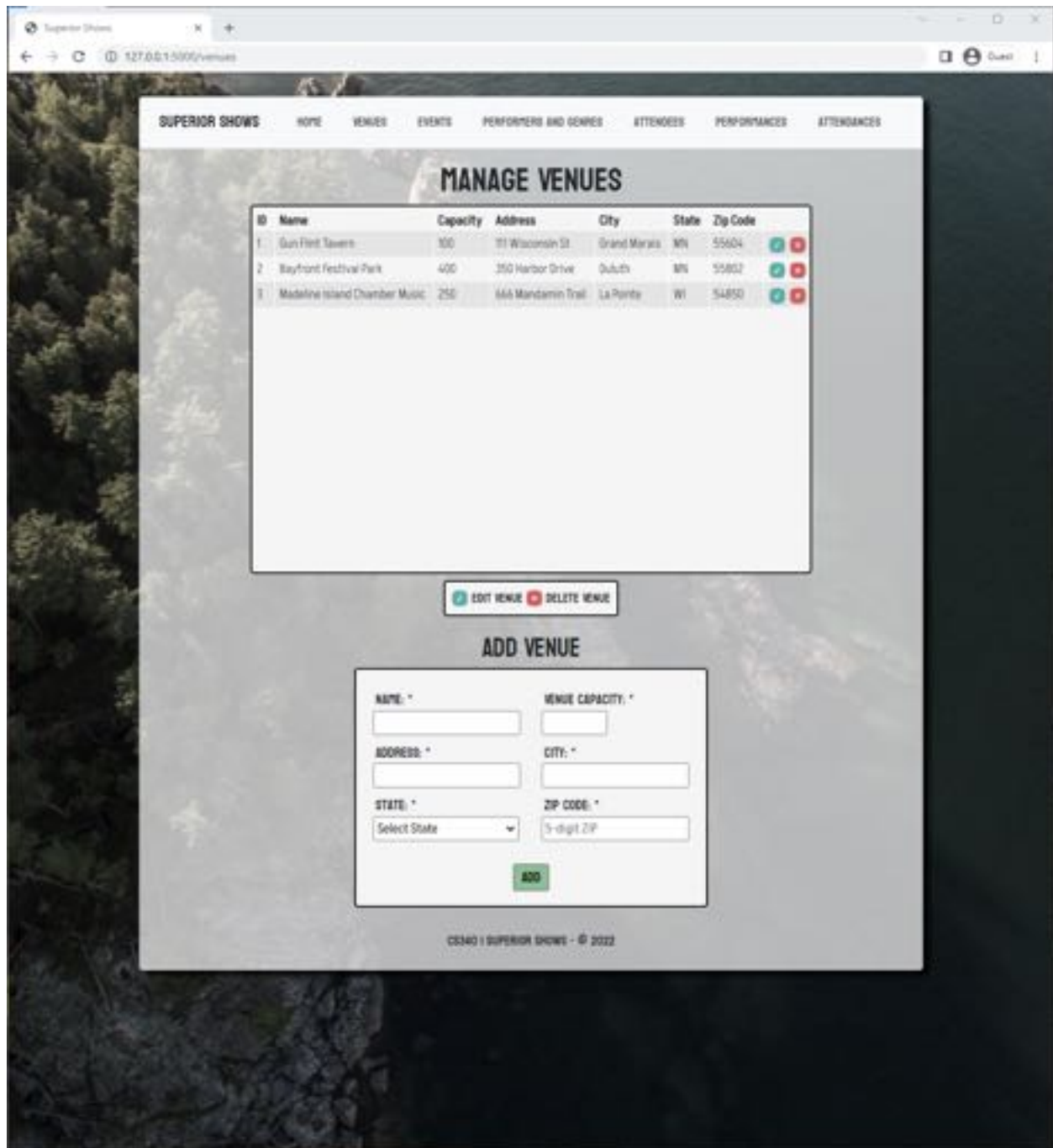
EVENT_ID	ATTENDEE_ID
references Drag Show	references Quinn Smith
references Lakefront Concert	references Quinn Smith
references Lakefront Concert	references Natalia Moreno
references Lakefront Concert	references Destiny Jones
references Comedy Show	references Natalia Moreno
references Comedy Show	references Amar Patil

Screen Captures

Index/Home Page:



Read/Browse/Display, Add/Insert, Initiate Edit/Update, Initiate Delete for Venues Entity:



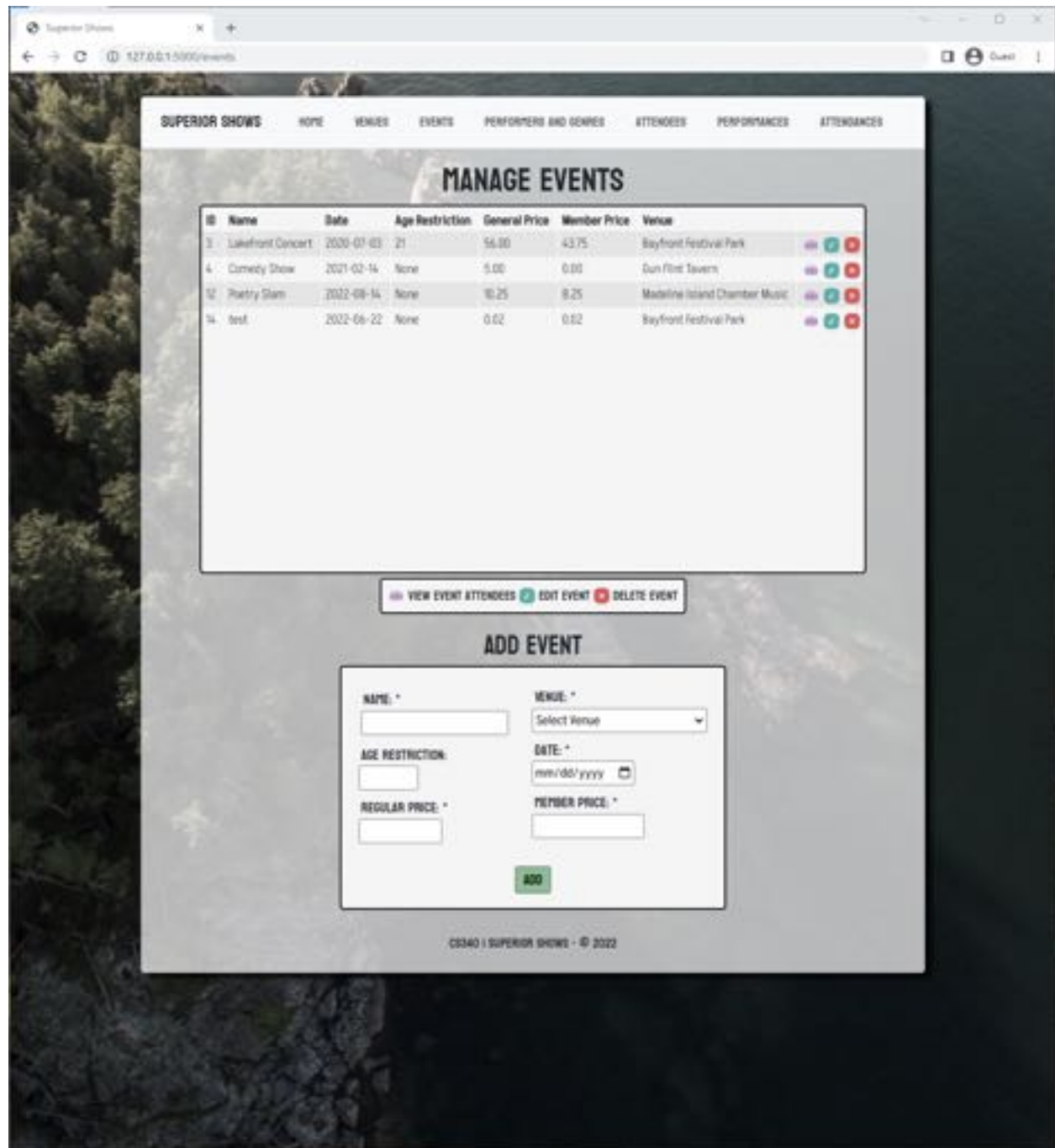
Edit/Update for selected row in Venues Entity:

The screenshot shows a web browser window with the URL `127.0.0.1:5000/update_venue/3`. The application is titled "SUPERIOR SHOWS" and has a navigation bar with links: HOME, VENUES, EVENTS, PERFORMERS AND GENRES, ATTENDEES, PERFORMANCES, and ATTENDANCES. The main content area is titled "UPDATE VENUE" and contains a form with the following fields:

NAME: *	VENUE CAPACITY: *
<input type="text" value="Madeline Island Chamber Mu"/>	<input type="text" value="250"/>
ADDRESS: *	CITY: *
<input type="text" value="666 Mandarin Trail"/>	<input type="text" value="La Pointe"/>
STATE: *	ZIP CODE: *
<input type="text" value="Wisconsin"/>	<input type="text" value="54850"/>

At the bottom of the form are two buttons: "UPDATE" (green) and "CANCEL" (red). The footer of the page reads "CS340 | SUPERIOR SHOWS - © 2022".

Read/Browse/Display, Add/Insert, Initiate Edit/Update, Initiate Delete for Events Entity:



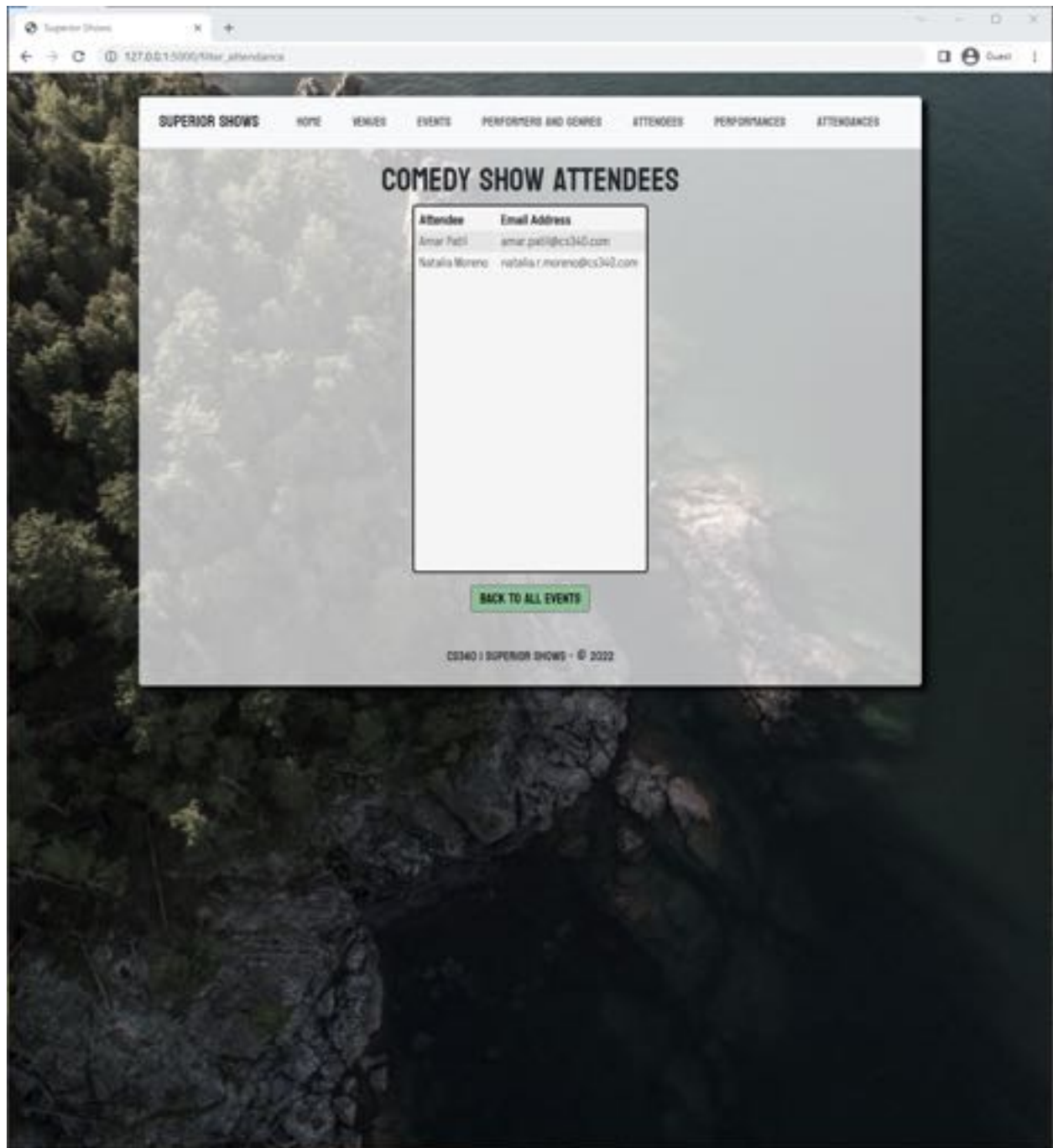
Edit/Update for selected row in Events Entity:

The screenshot shows a web browser window with the address bar displaying "127.0.0.1:5000/update_event/4". The page has a navigation bar with links: SUPERIOR SHOWS, HOME, VENUES, EVENTS, PERFORMERS AND GENRES, ATTENDEES, PERFORMANCES, and ATTENDANCES. The main content area is titled "UPDATE EVENT" and contains a form with the following fields:

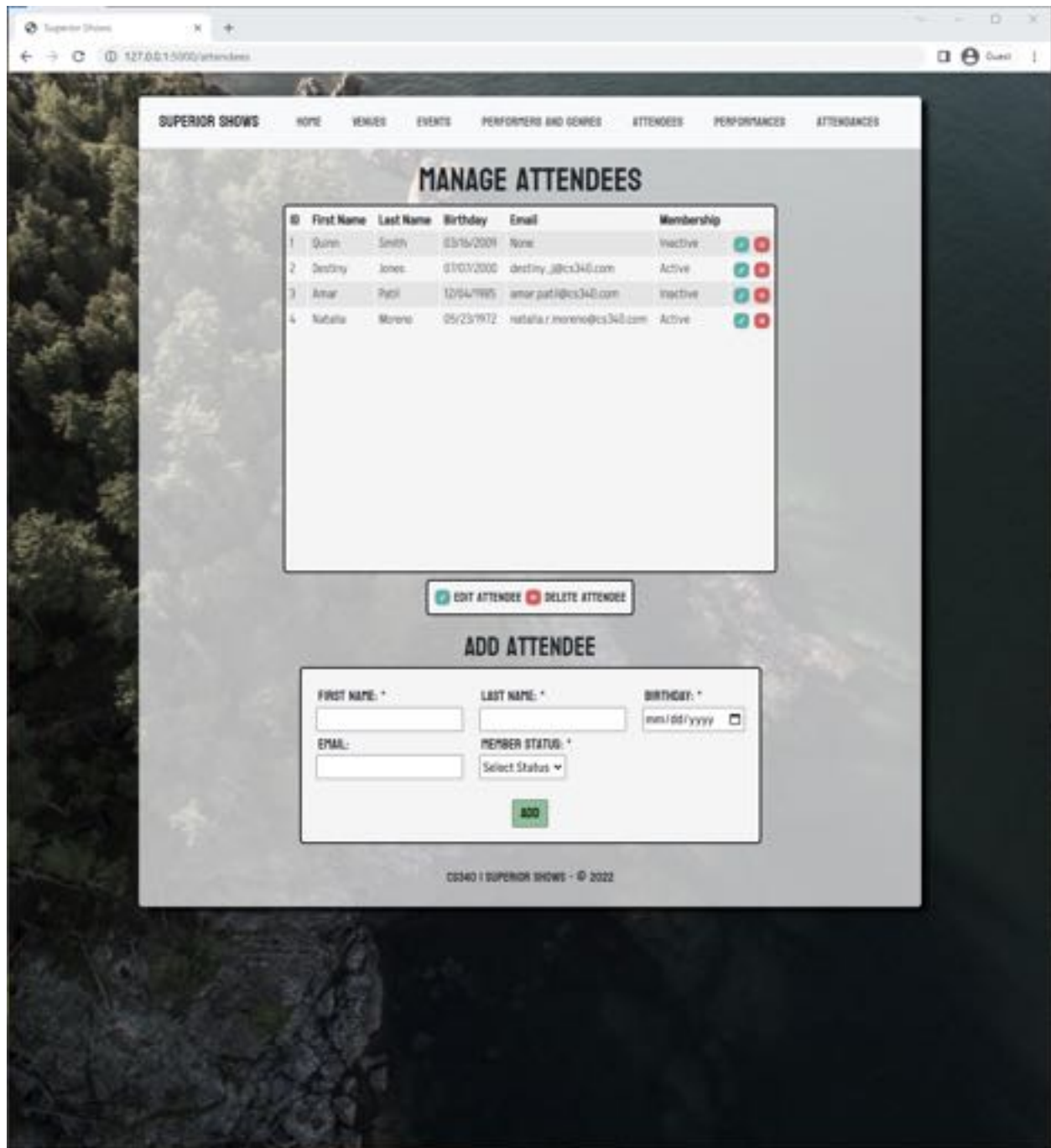
- NAME: * (Text input: Comedy Show)
- VENUE: * (Dropdown menu: Sun Flint Tavern)
- DATE: * (Date input: 02/14/2021)
- AGE RESTRICTION: (Text input)
- REGULAR PRICE: * (Text input: 5.00)
- MEMBER PRICE: * (Text input: 0.00)

At the bottom of the form are two buttons: "UPDATE" (green) and "CANCEL" (red). The footer of the page reads "CS340 | SUPERIOR SHOWS - © 2022".

Filtered Search results for selected row in Events Entity that Reads/Displays Attendee List and Email addresses for all attendees of the Event:



Read/Browse/Display, Add/Insert, Initiate Edit/Update, Initiate Delete for Attendees Entity:



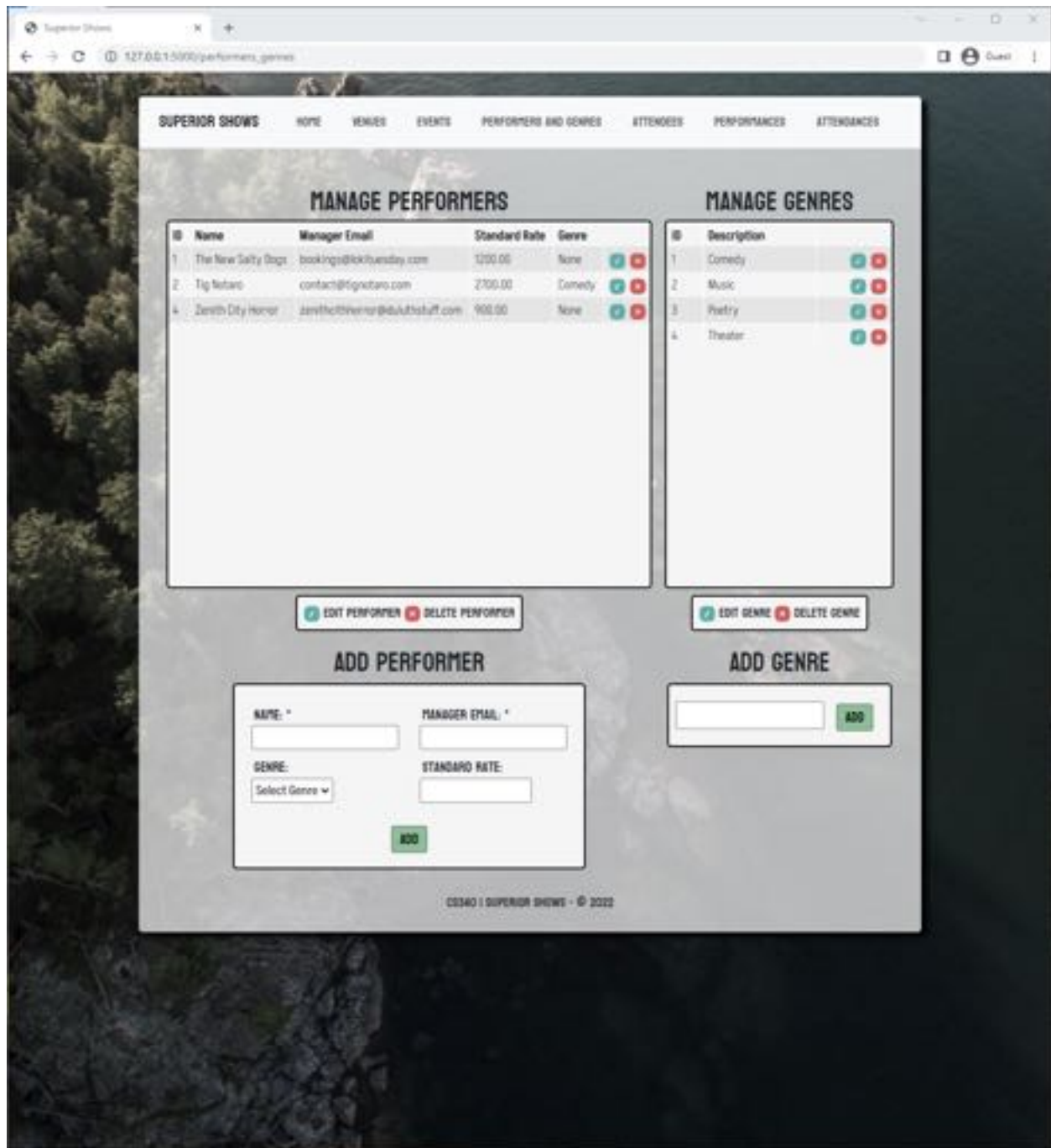
Edit/Update for selected row in Attendees Entity:

The screenshot displays a web browser window with the address bar showing '127.0.0.1:5000/update_attendee/4'. The browser tab is labeled 'Superior Shows'. The website's navigation bar includes links for 'SUPERIOR SHOWS', 'HOME', 'VENUES', 'EVENTS', 'PERFORMERS AND GENRES', 'ATTENDEES', 'PERFORMANCES', and 'ATTENDANCES'. The main content area features a modal titled 'UPDATE ATTENDEE' with the following fields:

- FIRST NAME: *** (Text input: Natalia)
- LAST NAME: *** (Text input: Moreno)
- EMAIL:** (Text input: natalia.moreno@cs340.com)
- MEMBER STATUS:** (Dropdown menu: Active)
- BIRTHDAY: *** (Date input: 05/23/1992)

Below the form are two buttons: 'UPDATE' (green) and 'CANCEL' (red). At the bottom of the modal, the footer text reads 'CS340 | SUPERIOR SHOWS - © 2022'.

Read/Browse/Display, Add/Insert, Initiate Edit/Update, Initiate Delete for Performers Entity and Primary_Genres Entity:



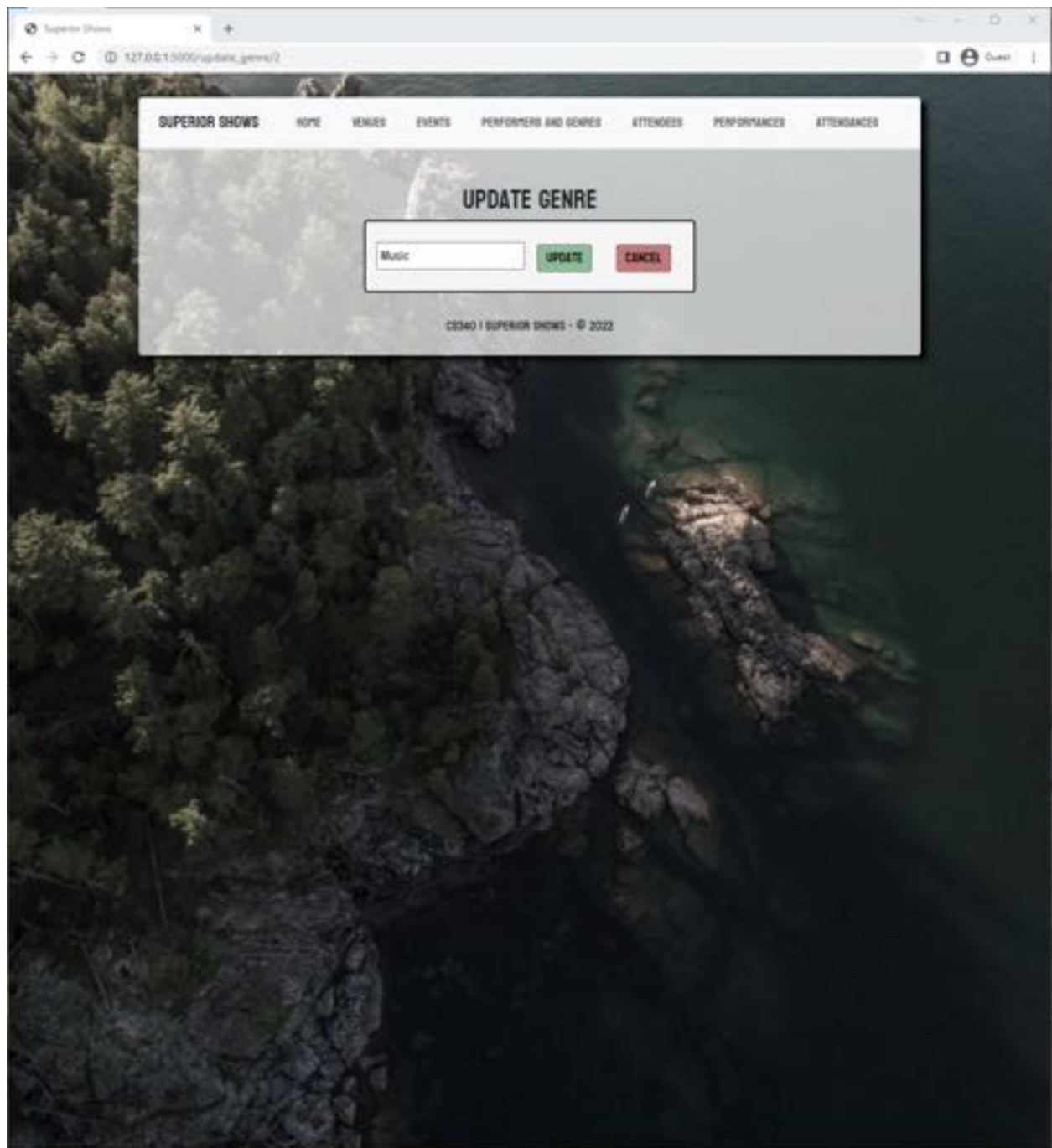
Edit/Update for selected row in Performers Entity:

The screenshot shows a web browser window with the address bar displaying '127.0.0.1:5000/update_performer/1'. The browser tab is titled 'Superior Shows'. The page features a navigation bar with the following links: SUPERIOR SHOWS, HOME, VENUES, EVENTS, PERFORMERS AND GENRES, ATTENDEES, PERFORMANCES, and ATTENDANCES. The main content area is titled 'UPDATE PERFORMER' and contains a form with the following fields:

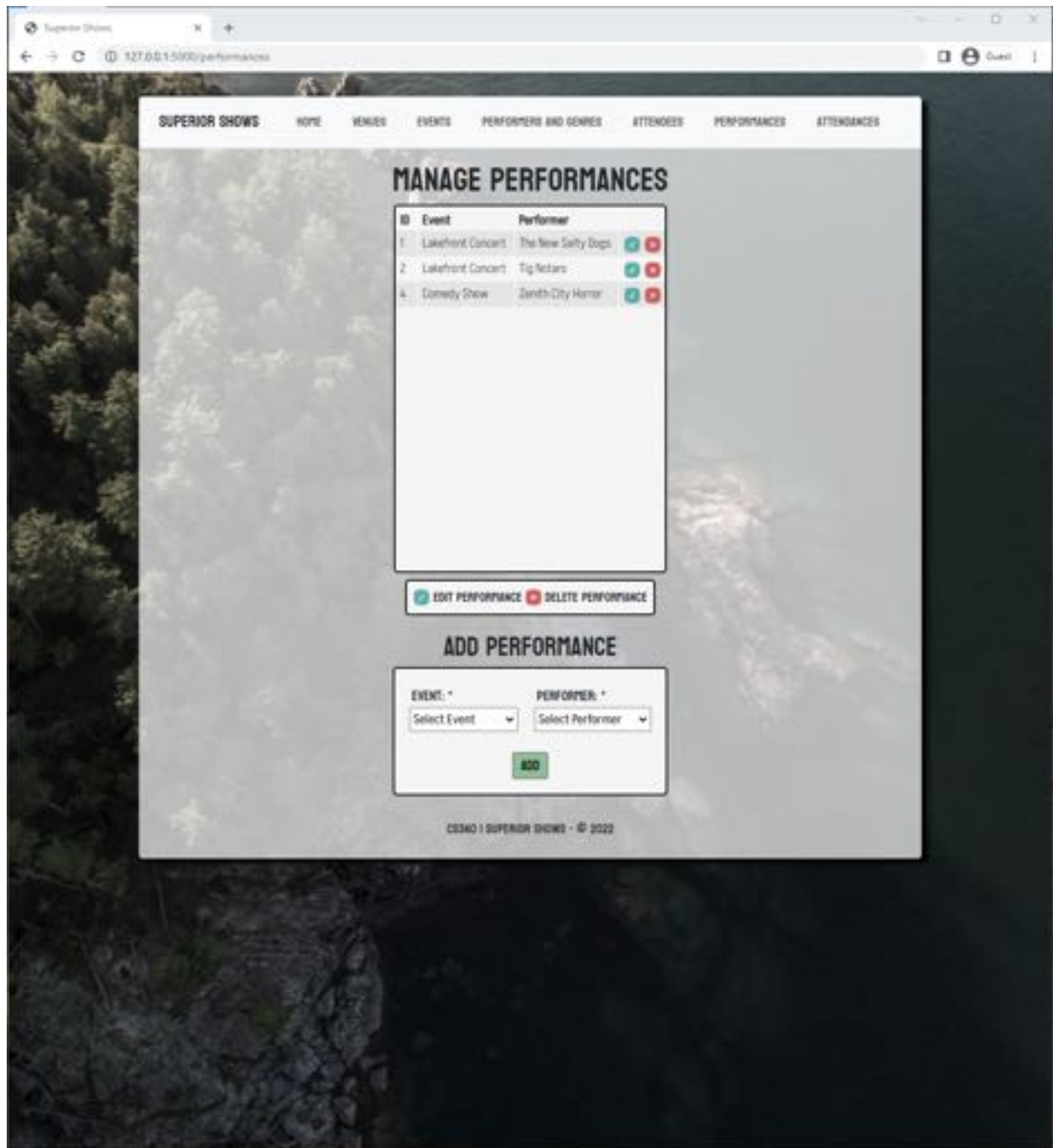
NAME: *	MANAGER EMAIL: *
<input type="text" value="The New Salty Dogs"/>	<input type="text" value="bookings@k4tuesday.com"/>
GENRE:	STANDARD RATE:
<input type="text" value="None"/>	<input type="text" value="1200.00"/>
<input type="button" value="UPDATE"/>	<input type="button" value="CANCEL"/>

At the bottom of the form, there is a footer that reads 'CS340 | SUPERIOR SHOWS - © 2022'.

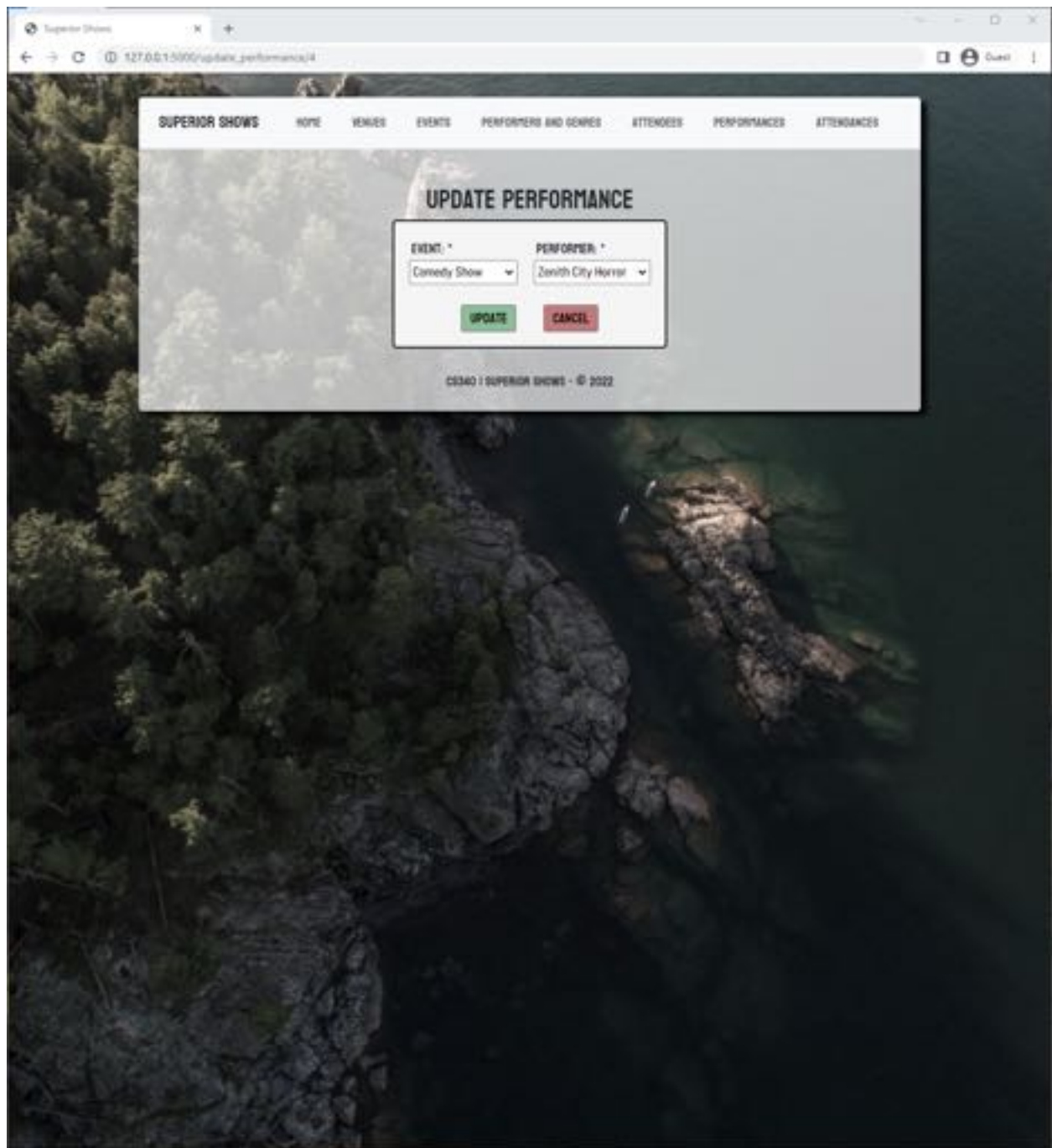
Edit/Update for selected row in Primary_Genres Entity:



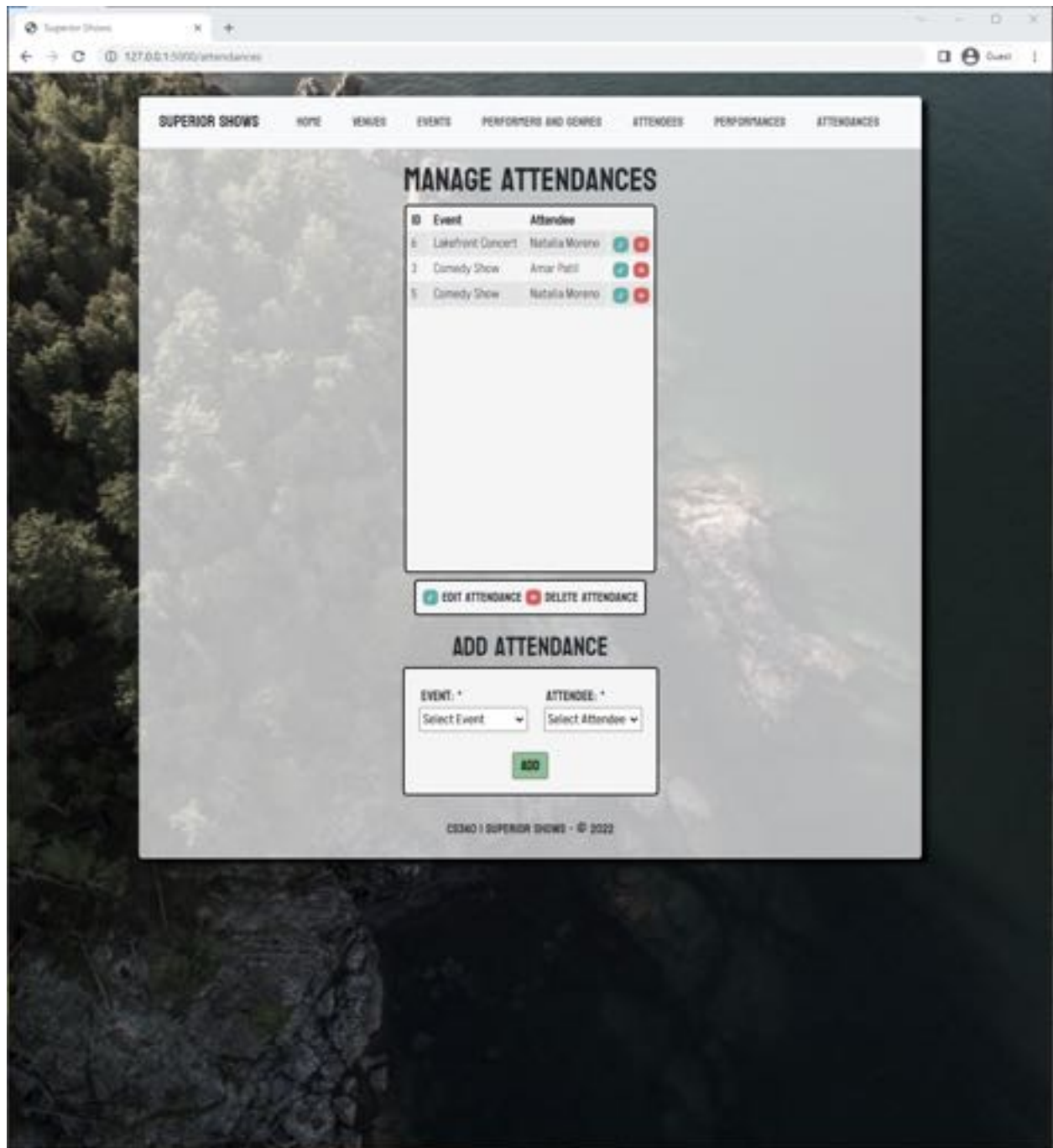
Read/Browse/Display, Add/Insert, Initiate Edit/Update, Initiate Delete for Events_has_Performers Entity:



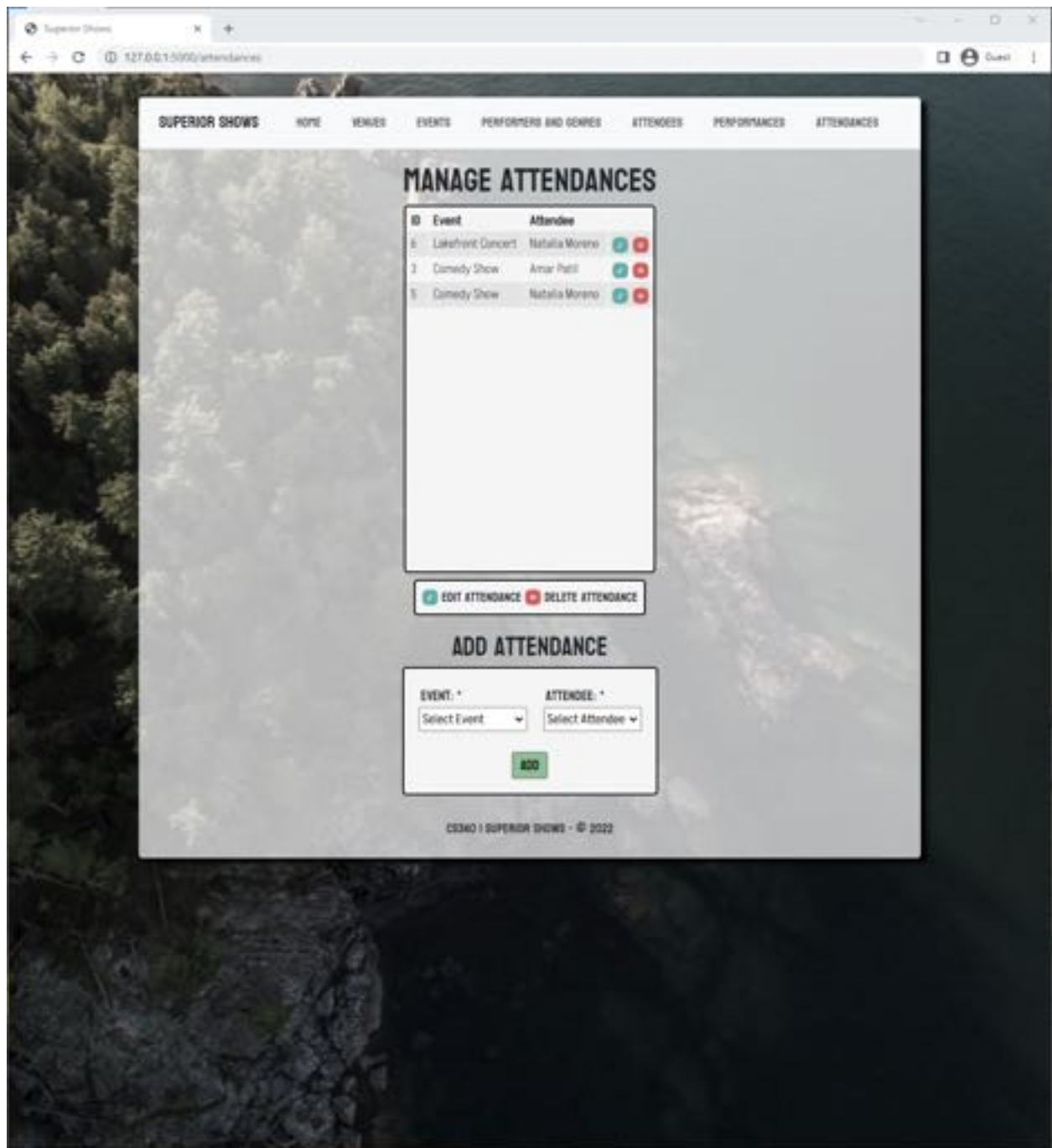
Edit/Update for selected row in Events_has_Performers Entity:



Read/Browse/Display, Add/Insert, Initiate Edit/Update, Initiate Delete for Events_has_Attendees Entity:



Edit/Update for selected row in Events_has_Attendees Entity:



Delete Confirmation Page when selecting delete option for row in any entity:

