**Aim:**

UMBeats is a DJ club that brings together people who enjoy the creation of music, building a community of DJ’s, musicians, producers, teachers, and students who convey themselves through music. The goal of this project is to increase sales and develop an online interface accessible through social networking websites such as Facebook and Twitter. We will be conducting surveys to improve customer satisfaction.

**Functional requirements:**

1. Process-oriented:
   1. The system will allow customers to view event details on the social networking sites.
   2. The system will allow customers to make suggestions about their music styles and music preferences through email system.
   3. The system will record customers answers to online surveys and music personality quiz.
   4. The system will select DJ’s based on music event rather than on availability.
   5. The system will allow the customers to view their DJ’s reviews.
   6. The system will record customer payment.
   7. The system will create a event ticket when a customer books an appointment.
   8. The system will allow the customer to cancel their appointment 48 hours in advance.
   9. The system will send each customer a 24 hour reminder for the event.
2. Information-oriented:
   1. The system must contain all the requests made by customers through online surveys and music personality quizzes.
   2. The system must contain all the information about the DJ performers and the music style they perform.
   3. The system must store a record of the users past DJ choices for a minimum 2 years.
   4. The system must maintain an active list of DJ’s.
   5. The system must contain each DJ’s availability for the month.
   6. The system must contain a review of each DJ.
   7. The system must maintain a customer payment log.
   8. The system must maintain a communication medium between customers and their selected DJ.

**Nonfunctional requirements:**

1. Operational:
   1. The system must have backup equipment in case of hardware failure.
   2. The surveys and music personality quizzes should run on any browser.
   3. The online interface will run on IOS and Android devices.
2. Performance:
   1. The online survey should not exceed more than 3 minutes.
   2. The music personality should not exceed more than 2 minutes.
   3. The answers to the survey must be limited to one choice per question.
   4. The DJ’s availability must be updated every hour and removed instantly when selected by a customer.
   5. The system must be able to respond to customer requests on priority based.
3. Security:
   1. Only event managers must have authorized access to the event requests.
   2. Only event managers can manage and view DJ’s personal information.
   3. Customer payment information must be safeguarded and accessed only by managers.
4. Cultural:
   1. The system must be open-minded about performing different music styles at the events.
   2. The system should select DJ’s according to the requested music event style.

**INTERVIEW SCHEDULE:**

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| **NAME** | **POSITION** | **PURPOSE OF INTERVIEW** | **MEETING** |
| Andrew Jefferson | Treasurer/ DJ | To gain a better perspective of how the organization works. | Fri, March 09  5:00 - 7:00 P.M. |
| Justin Milton | President/ DJ | To question the president and determine how the organization does work | Fri, March 09  5:00 - 7:00 P.M. |
| Matt Vermont | Vice President/ DJ | To analyze the differences between the president and vice President | Fri, March 09  5:00 - 7:00 P.M. |
| Quentin Jones | Performer | To understand a performer’s point of view | Fri, March 09  5:00 - 7:00 P.M. |
| Nick Spears | Lead Audio Engineer | To understand different views from different members in the company. | Fri, March 09  5:00 - 7:00 P.M. |

**INTERVIEW NOTES:**

Interview 1 - Andrew Jefferson, Treasurer/DJ

* How does the organization get business?
  + President normally goes out and uses his resources to obtain customers
  + Moderately successful system
  + Can be slow at times
  + Could be more business
* Challenges in the Organization
  + Availability
    - Main issue
  + Ill-fitted style
    - asked to “play good music”
    - Andrew has a software where he can grab new music quickly
  + Equipment Failure
    - hopefully someone is around
* Would a system that collected information from a client help?
  + Easier if organization had information beforehand
    - Tells organization what style is wanted?
    - Organization can see who fits the style
    - DJ’s can plan a set
* Is there a possibility for more money?
  + If the organization knows this and can sample the music, then yes.
* How are DJ’s selected?
  + Ineffective system
  + President will ask who can do it
  + Volunteer System
* What would you change?
  + Having a way to see who is available and what their style is.

Interview 2 - Justin Milton, President/DJ

* How does the organization get business?
  + People normally reach out to the club, whether it be individuals or other organizations
* Challenges faced
  + Relatively new organization
  + Member retention and involvement
* On-Site Problems
  + Does not deal with normal problems
    - Performers are always present and on time
  + Dead or inactive crowds
  + Music is not always available
    - Client asked for “The Lion King” soundtrack
* Ill-fitted Style
  + Hip-Hop style
    - Contains profanity, which some organizations that they have worked with, ban.
  + Solution is to wing it/ improvise
* Performer Selection
  + Two primary ways
    - “Who we ‘think’ fits the event?”
    - DJ Manager spreads out opportunity
* Would a system that contains important information work?
  + Yes, availability is the most important aspect of the event
  + Confident that customer satisfaction will increase
  + Not as confident in organizational income increase

Interview 3 - Matt Vermont Vice President/DJ

* How does the organization get business?
  + Connections with other organizations are essential to provide the organization with business.
* Challenges faced
  + Communication
    - Event details tend to be lost in communication.
  + Bad DJ matching
    - Normally can tell by song requests
* Ill-fitted Style
  + Electronic Dance Music style
    - Style is not very popular with the normal crowd in his experience
  + Solution is to mix in other genres to make the crowd happy and incorporate his own style.
* Performer Selection
  + Two primary ways
    - Randomly
    - Sometimes email submissions, volunteering
* Would a system that contains important information work?
  + Yes, the system would definitely work and make daily situations easier.
  + Helps nullify ill-fitted style problem
    - Japanese Student Association was sent a rapper when they just wanted “chill” music.
  + System would have to deal with case by case situations.

Interview 4 - Quentin Jones, Performer

* What is your performance genre/style?
  + Rhythm and Blues, Soul music, Hip-Hop
* Challenges you face as a performer
  + Setup, preparation time, practice times
  + His personal Schedule
    - Time before a performance
* How are you notified of performances?
  + It varies, in terms of time, between two days and three weeks
    - Consistency will make the job easier
* What happens if the performance time does not fit your schedule?
  + Mr. Jones normally tries to work around it.
    - This happened during JSA event.
* On-site issues
  + Other people not being prepared
    - This makes his job harder and performances more stressful
* Ill-fitted styles
  + Some cases
    - JSA event with Matt Vermont
* Would a system help ease problems?
  + Yes, a system would resolve a lot of issues
    - Particularly scheduling

Interview 5 - Nick Spears, Lead Audio Engineer

* How does the organization get business?
  + Organization normally collaborates with or adds on to another organization’s event.
  + Currently planning concerts and other events.
* Challenges faced
  + Expanding the organization in order to have more resources and reach.
* On-Site Problems
  + Nick says that something will always go wrong.
* Ill-fitted Style
  + Electronic Dance Music style
    - EDM is his music of choice, so he does not really branch out.
  + Solution is to be honest with the crowd and admit to not having it.
* Performer Selection
  + Two primary ways
    - Contact DJs in advance
    - Nick notes that it is difficult to have a perfect match in terms of music style
* Would a system that contains important information work?
  + Hesitant about the system because the lack of Human involvement
    - The person is a huge factor in the performance, so the system should not choose a person.
    - Suggested that the user gives a suggestion list to the club.
  + Nick notes that the system will be helpful on a larger scale.

**UMBeatsClub Questionnaire Responses:**

Response rate: 37.5 percent

What is your style of music that you like to perform?

MV: EDM and Hip-Hop

BL: EDM

AJ: EDM and House Music

Is it a popular style?

MV: Very popular

BL: NO

AJ: It is popular, but in a more club or party situation

Have you been recruited to dj before?

MV: Many Times

BL: Yes

AJ: I have been recruited by friends and UMBeats Club to DJ events

If so, what was the process?

MV: In some cases, I was asked to submit a mix so they could judge my skills, in other cases they asked for one and I volunteered and that was that

BL: Some (seb) event

AJ: For UMBeats, I was just given the oppourtinity and they just asked If I could do it. There really wasn’t much of a process

Did you have a lot of information about the organization you're djing for?

MV: A decent amount

BL: Yes

AJ: I just got the theme of the event and the name of the organization

Did you know what music they preferred?

MV: Yes, although it was somewhat open-ended

BL: Yessir

AJ: I did not know what they preferred so I had to guess

Did the opportunity come up last minute?

MV: Sometimes yes, sometimes no

BL: More than Likely

AJ: Yes

Did you get a chance to meet representatives for the organization?

MV: For UMBC events we often had contact with the representatives asking for us to perform. For off campus events, I had talked with representatives over the phone before being hired

BL: I am a representative

AJ: I only got a chance to meet the representatives at the event as I was setting up

If so, was the meeting satisfactory?

MV: Yes, all the meetings went well in my opinion

BL: No Comment

AJ: N/A

If this organization gave specific djs based on the event, do you think we can charge more?

MV: Yes. If we tailored DJ’s to fit specific performances, I believe we could charge more for the effort

BL: Yes

AJ: We could charge based on experience level of the DJ and how experienced they are with that genre.

**Use Case Analysis:**

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| **Use Case Name: Customer Needs DJ** | | | **ID: 01** | | **Priority: High** | |
| **Brief Description: This use case describes how the customer is in need for a DJ.** | | | | | | |
| **Actor: Customer** | | | | | | |
| **Trigger:**  **Type External Temporal** | | | | | | |
| **Preconditions: 1. Customer needs a party for a DJ to attend to.**  **2. Customer has knowledge that there is a private DJ.**  **3. Customer knows about UMBeats.** | | | | | | |
| **Normal Course**  **1. Customer chooses to throw a party**  **2. Customer will choose the method in which (s)he wants the music.**  **3. Once decided it will be by UMBeats, the customer will create an account.**  **4. Customer will then take the online survey to figure out that DJ is the best match.** | | | | **Information for Steps**      **<= username and password**    **<= DJ ID match to customer ID**    **<= DJ matching criteria** | | |
|  | | | | | | |
| **Postconditions: 1. Customer does end up using UMBeats.**  **2. Customer can use different DJ services.**  **3. Customer Creates Account.** | | | | | | |
| **Exceptions: E1: Account is invalid:**  **1. System will display message that Email has been used already or Email does not send verification.**  **2. System will ask to re-enter information if filled out wrong.** | | | | | | |
| **Summary:**  **Inputs Source Outputs Source** | | | | | | |
| **Username and password**  **DJ** | **UMBeats Disk Jockey DB**  **UMBeats** |  | | | |  |

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| **Use Case Name: Customer takes online Survey** | | | **ID: 02** | | **Priority: High** | |
| **Brief Description: This Use case describes how the customer will take an online survey to figure out who is the perfect DJ for the event.** | | | | | | |
| **Actor: Customer** | | | | | | |
| **Trigger:**  **Type ¨ External ¨ Temporal** | | | | | | |
| **Preconditions: 1. Customer needs to know what kind of music (s)he wants for the event.**  **2. The customer must have an event planned.**  **3. Customer must have access to the internet.**  **4. Customer must create account on UMBeats.** | | | | | | |
| **Normal Course**   1. **Customer will create account on UMBeats.** 2. **Customer answers questions in regards to music for the DJ selection.** 3. **The system will then confirm all answers to make sure it is best fit for the customer.** | | | | **Information for Steps**  **<= username and password**    **=>finding DJ for customer**    **<= music submission confirmation** | | |
|  | | | | | | |
| **Postconditions: 1. Customer can change DJ if desired**  **2. Customer now has information in the DB for the system to correctly match the DJ.** | | | | | | |
| **Exceptions: E1: If customer does not agree with the results with the UMBeats selection:**   1. **The System will then have the customer retake the survey with modified questions to have best fit for the customer.** 2. **The system will offer other music genre choices that may sound like it will also match the customers desired music genre.** | | | | | | |
| **Summary:**  **Inputs Source Outputs Source** | | | | | | |
| **Username and password**  **Music Submission** | **UMBeats DJ DB**  **UMBeats** | **Finding DJ for customer** | | | | **DJ DB** |

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| **Use Case Name: Finalizes DJ is a good match** | | | **ID: 03** | | **Priority: High** | |
| **Brief Description: This use case describes how the customer will finalize if the DJ is a good match based on the systems results.** | | | | | | |
| **Actor: Customer** | | | | | | |
| **Trigger:**  **Type ¨ External ¨ Temporal** | | | | | | |
| **Preconditions: 1. Customer completed the online survey.**  **2. Customer correctly put information in online survey.** | | | | | | |
| **Normal Course**   1. **The customer will have completed the online survey.** 2. **The customer will then be asked if all the information provided was correct.** 3. **If the customer confirms the online survey**    1. **Customer will choose the available DJ that are in chose genre. IF NOT:**    2. **System will repeat Step 1 unti reaches Step 3a** | | | | **Information for Steps**  **=> Available DJs**  **<= Confirmation**          **=> confirm DJ**  **=> find new DJ** | | |
|  | | | | | | |
| **Postconditions: 1. Customer successfully found a DJ for preferred genre of music.**  **2. Customer can change DJ at any time.**  **3. Customer can now set up a reserved date for the DJ to perform.** | | | | | | |
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| **Summary:**  **Inputs Source Outputs Source** | | | | | | |
| **Confirmation** | **Customer DB**  **DJ DB** | **Available DJs**  **Confirming new DJ**  **Finding new DJ** | | | | **DJ DB** |

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| **Use Case Name: Choosing available dates** | | | **ID: 04** | | **Priority: High** | |
| **Brief Description: This use case describes how the customer will choose their available dates and if it will match the DJs open dates.** | | | | | | |
| **Actor: Customer** | | | | | | |
| **Trigger:**  **Type ¨ External ¨ Temporal** | | | | | | |
| **Preconditions: 1. Customer has desired date for the event.**  **2. Customer has a DJ chosen already.**  **3. Customer has sufficient amount of time to set up for the event.** | | | | | | |
| **Normal Course**   1. **Customer logins to account** 2. **Customer will pull up in the DJ interested in.** 3. **Find the available dates that correlate with the DJs** 4. **Customer will choose the date that the matches with the DJ** 5. **Submits the date and finalizes the date for the DJ** | | | | **Information for Steps**  **<= Account Information**  **=> DJs interested in**  **=> DJs Availability**        **<= confirmation of date** | | |
|  | | | | | | |
| **Postconditions: 1. Customer can change DJ at anytime.**  **2. Customer can change the date as long as both dates match for availability.**  **3. Customer is allowed access to view different DJs.** | | | | | | |
| **Exceptions: E1: DJ is already reserved for that date:**   1. **The System will notify the customer and redirect the customer to another date and check for availability.** 2. **System will ask for a custom date if none of the dates match with the customers.** | | | | | | |
| **Summary:**  **Inputs Source Outputs Source** | | | | | | |
| **Account information**  **Confirmation Date** | **Customer DB**  **DJ DB** | **DJs Interested in**  **DJs Availability** | | | | **DJ DB** |

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| **Use Case Name: Finalize Purchase** | | | **ID: 05** | | **Priority: High** | |
| **Brief Description: This use case describes how the customer will finalize their order of the DJ after choosing the DJ and the date.** | | | | | | |
| **Actor: Customer** | | | | | | |
| **Trigger:**  **Type ¨ External ¨ Temporal** | | | | | | |
| **Preconditions: 1. Customer has enough money to order the DJ.**  **2. The customer chose the right date that best suits the customer.** | | | | | | |
| **Normal Course**   1. **Login to Customer account.** 2. **Pull up the reservations made with DJ** 3. **Complete the payment online.** 4. **Order is successful and system will send notification for successful transaction.** | | | | **Information for Steps**  **<= Account information**  **=> reservation list**  **<= credit card information**  **=> notification for transaction** | | |
|  | | | | | | |
| **Postconditions: 1. Customer can still alter date if need be.**  **2. Customer can rate the services of the DJ.**  **3. Can Add or modify the DJs for the event.** | | | | | | |
|  | | | | | | |
| **Summary:**  **Inputs Source Outputs Source** | | | | | | |
| **Account info**  **Credit card info** | **Customer DB** | **Reservation list**  **Notification for transaction** | | | | **DJ DB**    **Orders DB** |