LUT University
School of Engineering Science
Department of Software Engineering

AUDIONOW PROJECT BY MEDIA FUN

Trieu Huynh Ba Nguyen (trieu.huynh.ba.nguyen@student.lut.fi)
Nazmul Khan (nazmul.khan@student.lut.fi)
Artturi Siven (artturi.siven@student.lut.fi)

TABLE OF CONTENTS

SYMBOLS AND ABBREVIATIONS

BCE	Boundary-Control-Entity
UML	Unified Modeling Language
AWS	Amazon Web Services
Multi-AZ	Multiple Availability Zones
ALARP	As Low As Reasonably Practicable

TEAMWORK METADATA

Part	Author(s)	Effort (hours)	Description
Introduction	Trieu Huynh Ba Nguyen	1	
Use Case Diagram	Trieu Huynh Ba Nguyen	1	
Use Cases	Trieu Huynh Ba Nguyen, Nazmul Khan, Artturi Siven	6 (combined)	Each author worked on 2 major use cases
Domain Model	Artturi Siven	2	
Infrastructure	Trieu Huynh Ba Nguyen	3	
BCE Model	Nazmul Khan	3	
Activity and Communication Diagrams	Trieu Huynh Ba Nguyen, Nazmul Khan, Artturi Siven	12 (combined)	Each author worked on the diagrams for their major use cases
Risk Analysis	Nazmul Khan	6	
Project Plan and Schedule	Artturi Siven	4	
Project Pitch and Conclusions	Trieu Huynh Ba Nguyen	4	

DECLARATION OF AI USE

Claude by Anthropic was used to generate ideas, while ChatGPT by OpenAI was used for summarizing texts, proofreading and copy-editing of this document.

1 INTRODUCTION

In this project, we are designing AudioNow, a social media and podcast platform developed by MediaFun Inc. AudioNow aims to deliver a comprehensive audio experience by integrating real-time voice-based social media interactions, podcast subscriptions, and fan product e-commerce into one single application. This new project allows MediaFun to consolidate their services within one proprietary ecosystem. The goal of our design is to support MediaFun's business objectives by creating a robust, scalable, and user-centric platform that provides seamless audio streaming, social engagement, and monetization opportunities for content creators.

We plan to provide an architecture that not only addresses the functional requirements but also considers scalability, reliability, and user experience. Through the Unified Modeling Language (UML) framework, we plan to provide a clear, systematic solution. This covers use case diagrams, class diagram, activity diagrams, and communication diagrams. The only exception is deployment diagram, which will be designed using Amazon Web Services (AWS). Each diagram is crafted to support MediaFun’s business goals and enhance customer satisfaction.

The project begins with use case analysis to identify interactions between users, external services, and the system. Based on these, we develop a domain model to illustrate the essential entities and their relationships. Next, we create a deployment diagram that demonstrates the infrastructure and hardware components supporting the system. This will be followed by defining the system architecture using a BCE (Boundary-Control-Entity) model. Finally, we will provide activity and communication diagrams for six major use cases. We will also conduct a limited risk analysis and propose an alpha project plan, including a schedule and tools required to bring the system to the alpha testing stage.

2 USE CASES

The use case diagram for AudioNow illustrates the primary interactions between various actors and system functionalities, providing an overview of how stakeholders interact with the platform's functionalities.

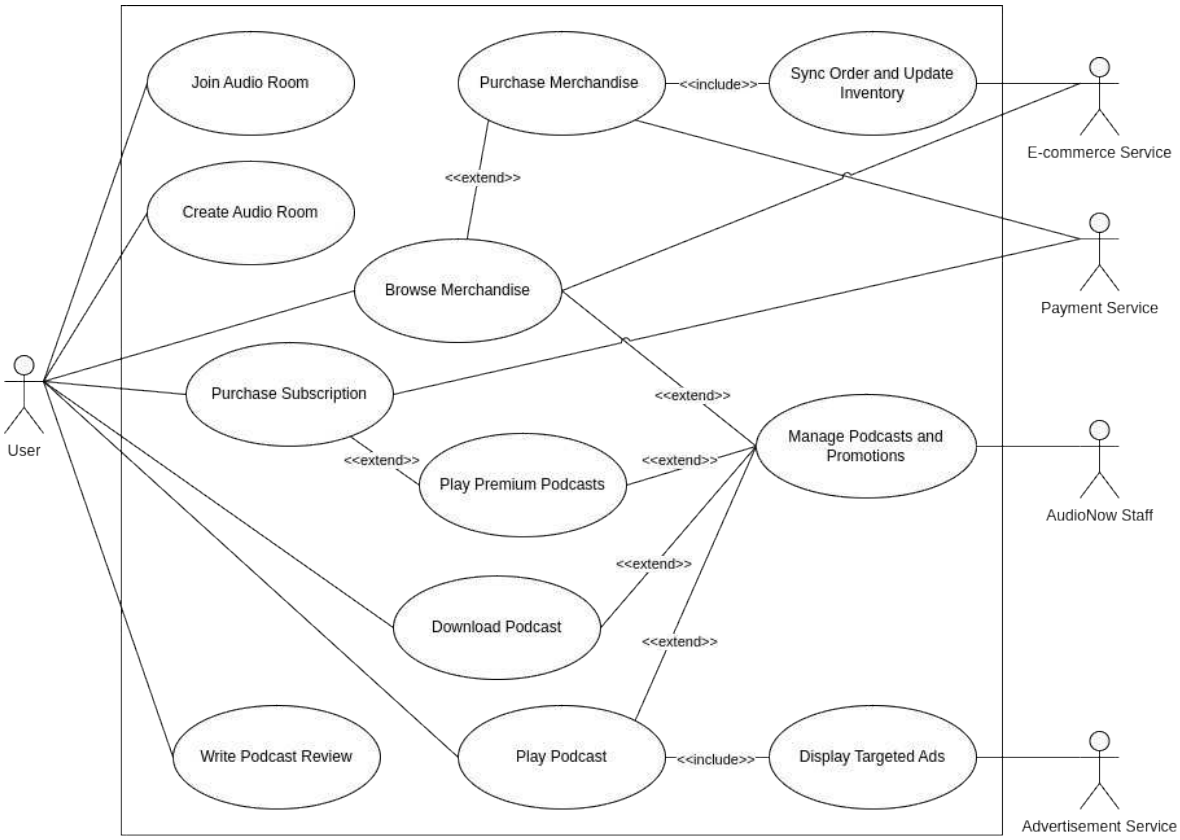


Fig 1. Use case diagram for AudioNow by MediaFun.

2.1 Actors

Actors	Description	Participated Use Case(s)
User	The primary actor who interacts with the core features of the AudioNow platform.	Join Audio Room, Create Audio Room, Browse Merchandise, Purchase Merchandise, Purchase Subscription, Play Podcast, Play Premium Podcast, Download Podcast, Write Podcast Review
AudioNow Staff	This actor represents the administrative team responsible for managing content and promotions on the platform.	Manage Podcasts and Promotions
Payment Service	An external service responsible for handling financial transactions on the platform.	Purchase Merchandise, Purchase Subscription
E-commerce Service	An external system manages the inventory and order processing for merchandise.	Purchase Merchandise, Sync Order and Update Inventory
Advertisement Service	An external system manages the delivery and targeting of advertisements to non-subscribed users.	Display Ads

2.2 Use Case Description

Use Cases	Description
Join Audio Room	Users can join existing audio rooms to participate in live discussions.
Create Audio Room	Users can create a new audio room and invite others to join.
Purchase Subscription	Users pay for a subscription to gain access to ad-free and premium content.
Play Premium Podcasts	Subscribed users can access and play exclusive, ad-free podcasts.
Browse Merchandise	Users explore and add merchandise items to their cart.
Purchase Merchandise	Users review their cart, proceed to checkout, and complete their purchase.
Play Podcast	Users play podcasts.
Display Ads	The system shows targeted ads based on user profiles and behaviors.
Download Content	Subscribed users select specific content to download for offline listening.
Manage Podcasts and Promotions	Admins add, remove, and promote podcasts, and set up special offers.
Sync Order and Update Inventory	System synchronizes orders with the billing system and updates inventory levels.
Write Podcast Review	Allows users to write and submit reviews for podcasts they have listened to, contributing feedback and ratings for other users.

2.3 Details of Major Use Cases

Use Case	**Join Audio Room**
Actor(s)	User
Description	Users can join existing audio rooms to participate in live discussions.
Flow of Events	1. The user navigates to the "Audio Rooms" section. 2. The system displays a list of available audio rooms. 3. The user selects a specific audio room. 4. The system verifies the room's availability and the user's permissions. 5. The user is granted access and can now participate in the discussion.
Alternative Flow of Events	Step 5: The audio room is full or access is restricted. • The system displays an appropriate message to the user. • The flow returns to Step 3 if the user chooses another room.
Special Requirements	• Audio streaming quality should adapt to the user's internet connection.
Preconditions	• The user must have a valid account on AudioNow. • The user must have a stable internet connection.
Postcondition	• The user successfully joins the discussion or exits the selection screen.

Use Case	**Create Audio Room**
Actor(s)	User
Description	Users can create a new audio room and invite others to join.
Flow of Events	1. The user navigates to the "Create Audio Room" option. 2. The system prompts the user for room details (e.g., name, topic, privacy settings). 3. The user submits the details. 4. The system creates the room and generates a unique invite link or code. 5. The user shares the invite link/code with others.
Alternative Flow of Events	Step 4: Invalid room details • The system prompts the user to provide corrections. • The flow resumes from Step 3 once valid inputs are provided.
Special Requirements	• The system must support creating 1,000 new rooms per minute during peak times.
Preconditions	• The user must have a valid account on AudioNow. • The user must have a stable internet connection.

Postcondition	• The new room is created and accessible. • The invite link/code is generated and logged.

Use Case	**Purchase Subscription**
Actor(s)	User, Payment Service
Description	The end-user purchases a subscription for premium content on AudioNow, gaining access to exclusive podcasts without advertisements.
Flow of Events	1. The user navigates to the podcast section and selects a subscription option. 2. The system displays the subscription fee and available benefits. 3. The user confirms the subscription and enters payment details. 4. The accounting system processes the payment. 5. The user gains access to exclusive podcast content and ad-free playback.
Alternative Flow of Events	Step 4: Payment fails due to insufficient funds or invalid payment method. • The user is prompted to try a different payment method. • If the payment succeeds, the flow resumes from Step 5.
Special Requirements	• Reliability: Payment processing should succeed 99% of the time. • Scalability: The system should handle up to 5000 new subscriptions per day.
Preconditions	• The user must have a valid account on AudioNow. • The Payment Service must be operational.
Postcondition	The user's subscription status is updated, and they receive access to premium content.

Use Case	**Purchase Merchandise**
Actor(s)	User, Payment Service, E-commerce Service
Description	The end-user purchases fan merchandise from the AudioNow store.
Flow of Events	1. The user has items in their cart and proceeds to checkout. 2. The system displays the total cost, including taxes and shipping. 3. The user confirms the order and enters payment details. 4. The Payment Service verifies the payment and sends the transaction and the order to the E-commerce Service to be further processed. 5. The system confirms the purchase and provides an

	estimated delivery date.
Alternative Flow of Events	Step 3: Payment fails due to insufficient funds or invalid payment method. • The user is prompted to try a different payment method. • If the payment succeeds, the flow resumes from Step 5.
Special Requirements	• Reliability: The system should ensure accurate inventory tracking and order processing 99% of the time. • Scalability: The system should support up to 2000 transactions per day.
Preconditions	• The user must have a valid account on AudioNow. • The Payment Service and E-commerce Service must be operational.
Postcondition	The order is placed, inventory is updated, and the user receives an order confirmation.

Use Case	**Manage Podcasts and Promotions**
Actor(s)	AudioNow Staff, Advertisement System.
Description	AudioNow staff with admin authority manages the content by adding, removing, or promoting podcasts. They may also develop and setup special promotions and marketing campaigns so that content and promotions are aligned in all the connected services.
Flow of Events	1. AudioNow Staff logs into the system with valid credentials. 2. AudioNow Staff navigates to the content management section. 3. AudioNow Staff selects an action: • Add a new podcast. • Remove an existing podcast. • Edit metadata (e.g., title, description, category). • Create or update promotional campaigns. 4. The system validates the inputs and performs the selected action: • Updates the podcast library and promotional settings in the database. • Synchronizes changes with the advertisement system. 5. The system displays a confirmation message.
Alternative Flow of Events	• Invalid Input (Step 4): 1. If invalid data is provided (e.g., missing fields, invalid podcast ID), the system detects the error during the validation step. 2. The system displays an error message indicating

	the problem (e.g., "Missing podcast title"). 3. The system prompts to correct the input and retry the action and returns to step 4 after corrections. • Database Save Failure (Step 4): 1. If the system encounters a database error during saving the podcast data or promotional settings: • The system rolls back the transaction to maintain data integrity. • The system logs the error and notifies the admin with an error message. 2. The AudioNow staff can retry the action at step 4. • Advertisement System Failure (Step 4): 1. If synchronization with the advertisement system fails: • The system completes saving the podcast data in the database. • The system logs the synchronization failure and notifies the admin with a warning. 2. The system informs to retry synchronization later.
Special Requirements	• The system must enforce role-based access control to ensure only authorized admins can access these features. • The system should give real-time updates to all connected services and systems (e.g., the advertisement platform). • All actions must be logged for audit and compliance purposes.
Preconditions	• AudioNow stuff must have valid admin login credentials and appropriate authority to access the system. • The system and connected services (e.g., the database, advertisement system) must be online and operational.
Postcondition	• The podcast library and promotional settings are updated in the database. • Changes are synchronized with the advertisement system.

Use Case	**Sync Order and Update Inventory**
Actor(s)	User, E-commerce Service, Inventory System, Payment Service.
Description	The system synchronizes the orders with the Inventory System after a purchase, reflecting accurate stock levels in real time.

Flow of Events	1. The user places an order through the system.
	2. The system validates the order and sends it to the E-commerce Service.
	3. The E-commerce Service checks inventory availability and reserves stock.
	  • If stock is sufficient, the Inventory System confirms the reservation.
	4. The E-commerce Service confirms payment via the Payment Service.
	  • If payment is successful, the E-commerce Service processes the order.
	5. The Inventory System updates the stock levels.
	6. The system sends an order confirmation to the user.

Alternative Flow of Events	• Inventory Out of Stock (Step 3):
	  1. Inventory System notifies E-commerce Service of insufficient stock.
	  2. E-commerce Service cancels or backorders the order and informs the user and flow ends here.
	• Payment Failure (Step 4):
	  1. Payment Service declines the payment and notifies E-commerce Service.
	  2. E-commerce Service cancels the order, releases reserved stock, and informs the user and the flow ends here.

Special Requirements	• Secure and encrypted communication between all actors. • Real-time inventory updates to prevent overselling. • Strong error-handling mechanisms for communication failures.
Preconditions	• User has selected an item and initiated a purchase. • The E-commerce Service, Payment Service, and Inventory System are operational.
Postconditions	• If successful: Payment is confirmed, stock is updated, and the user is notified. • If unsuccessful: Reserved stock is released, and the user is informed.

3 DOMAIN MODEL

The class diagram for the AudioNow platform outlines the main entities required to manage subscriptions, user interactions, content playback, and merchandise transactions within the platform. Users can join audio rooms, access premium podcasts, purchase merchandise, and write reviews. Subscriptions grant ad-free access, while orders and transactions handle merchandise purchases, supported by the Merchandise and Category classes. Advertisements are displayed for non-subscribed users within podcasts. Relationships and attributes were chosen to capture key interactions, with User at the center, linking to subscriptions, orders, and social features like audio rooms and reviews.

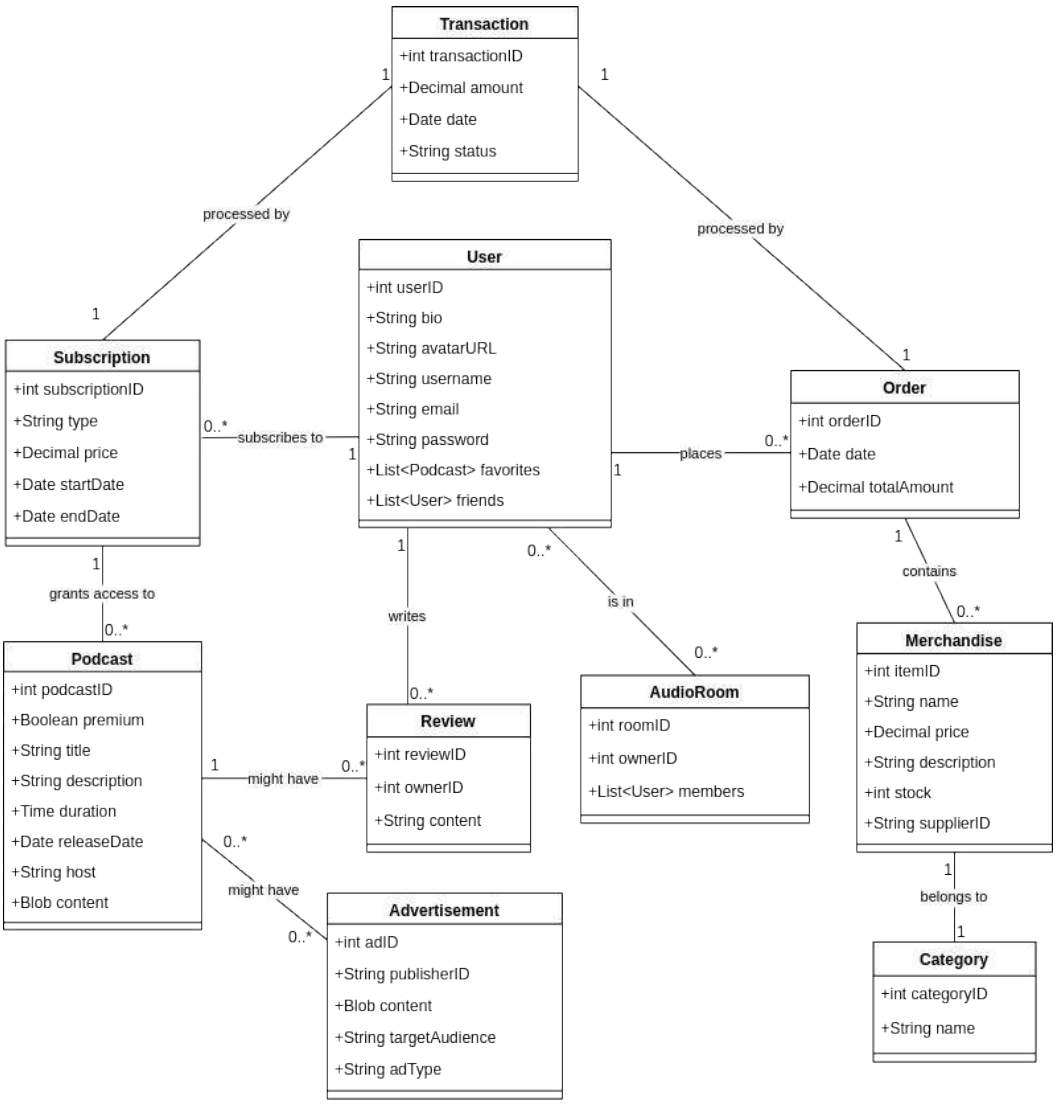


Fig 2. Class diagram for AudioNow by MediaFun.

4 INFRASTRUCTURE

This deployment diagram presents the AudioNow system infrastructure using AWS. The architecture follows the three-tier model: Front-end, Back-end, and Databases, all deployed within a Virtual Private Cloud (VPC) spanning multiple Availability Zones for redundancy and fault tolerance.

The Front-end is deployed via AWS Amplify, with optional static content in Amazon S3. Amazon CloudFront ensures global caching and delivery, while AWS WAF protects against web threats, and Amazon Cognito manages user authentication. The Back-end uses EC2 instances in private subnets for security, with NAT Gateways enabling controlled outbound internet access. The Database layer relies on Amazon RDS, deployed in private subnets across multiple Availability Zones for high availability. Networking is streamlined with a load balancer for traffic distribution and Route 53 for DNS management.

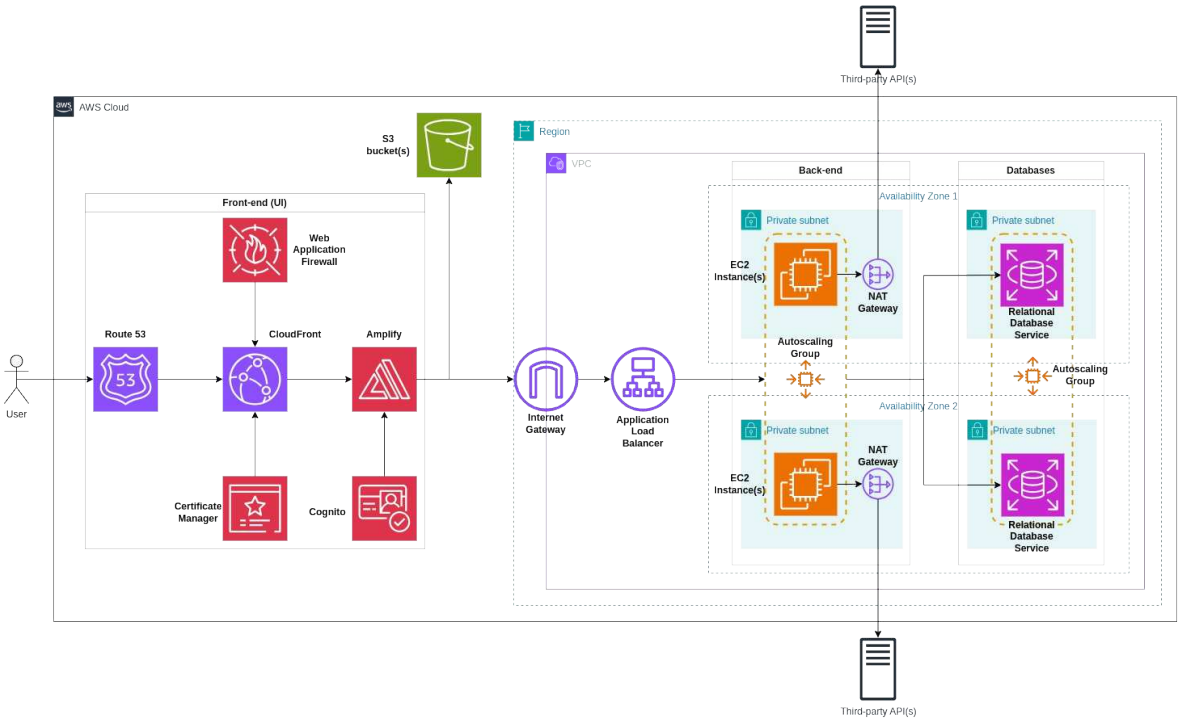


Fig 3. Deployment diagram for AudioNow by MediaFun.[1]

[1] The deployment diagram deviates from standard UML conventions to better represent modern cloud-native AWS architecture. This is an informed choice done by the authors.

5 BCE SYSTEM MODEL

The BCE diagram for the AudioNow platform separates the system into three core components to enhance modularity and clarity in design. The Front-end (UI) and API serve as the boundary between the user and the platform's features. The Controller components include the Podcast Controller, Audio Room Controller, Subscription Controller, Order Controller, and Advertisement Controller. They handle the system's logic and operations by based on user inputs from the boundary. Finally, the Entity components represent the core data models that store information in the system, such as Podcast, Audio Room, Subscription, Order, and Ads.

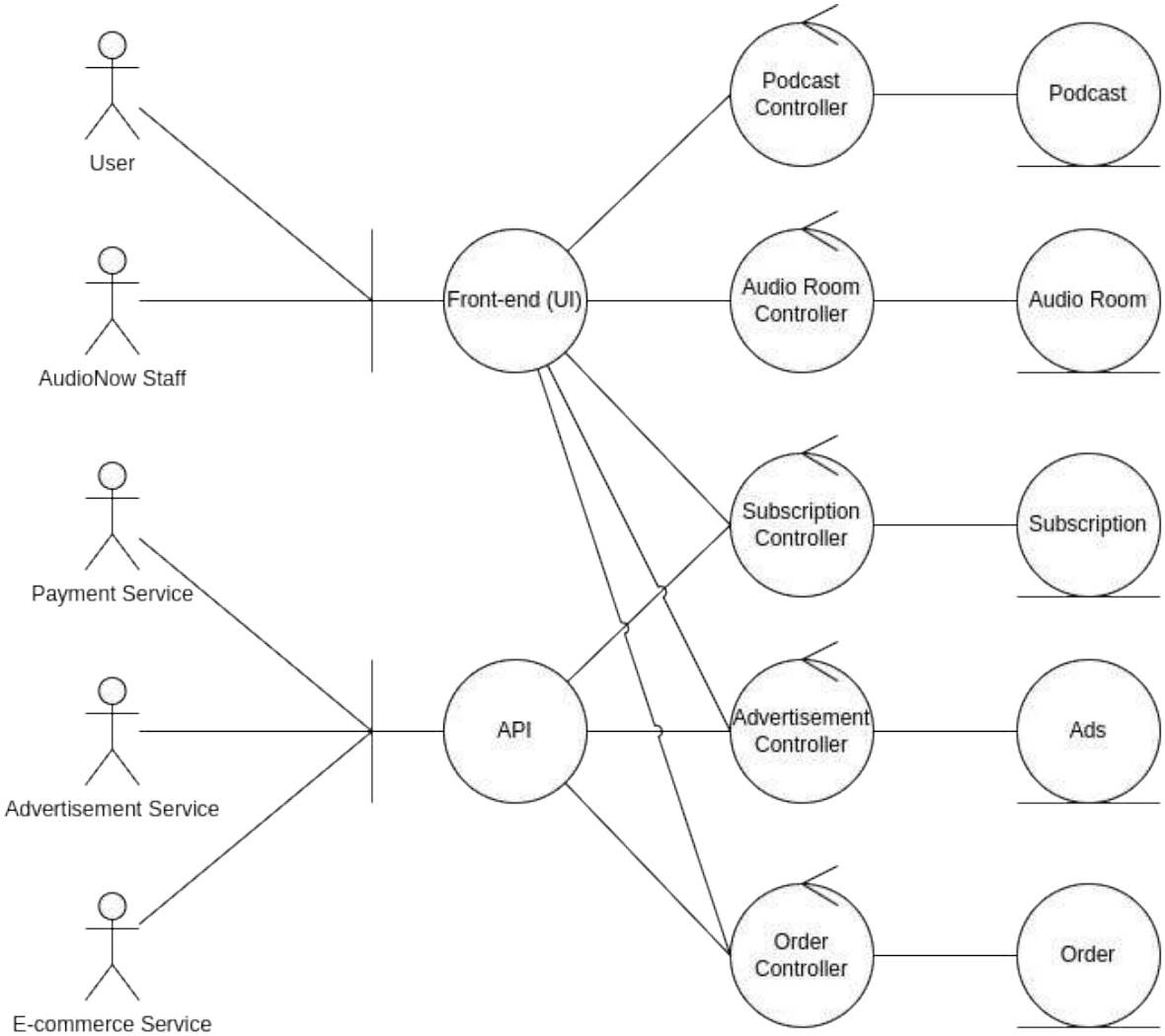


Fig 4. BCE diagram for AudioNow by MediaFun.

6 ACTIVITY AND COMMUNICATION DIAGRAMS

6.1 Use case: Purchase Subscription

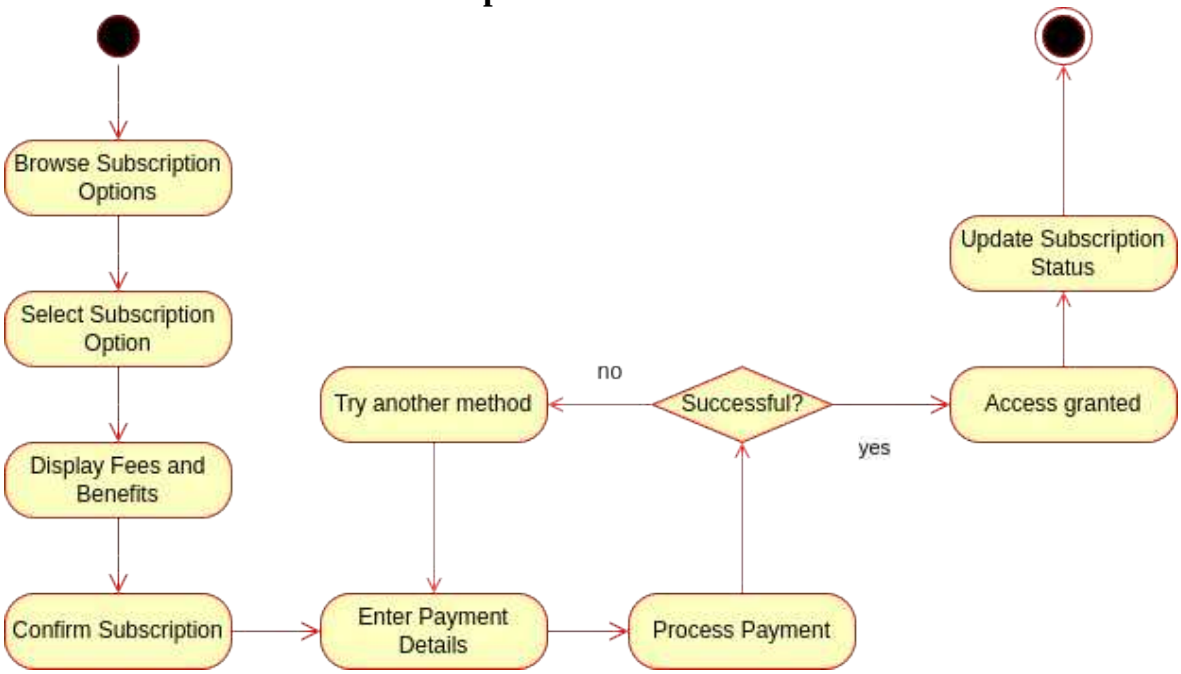


Fig 5. Activity diagram for Purchase Subscription.

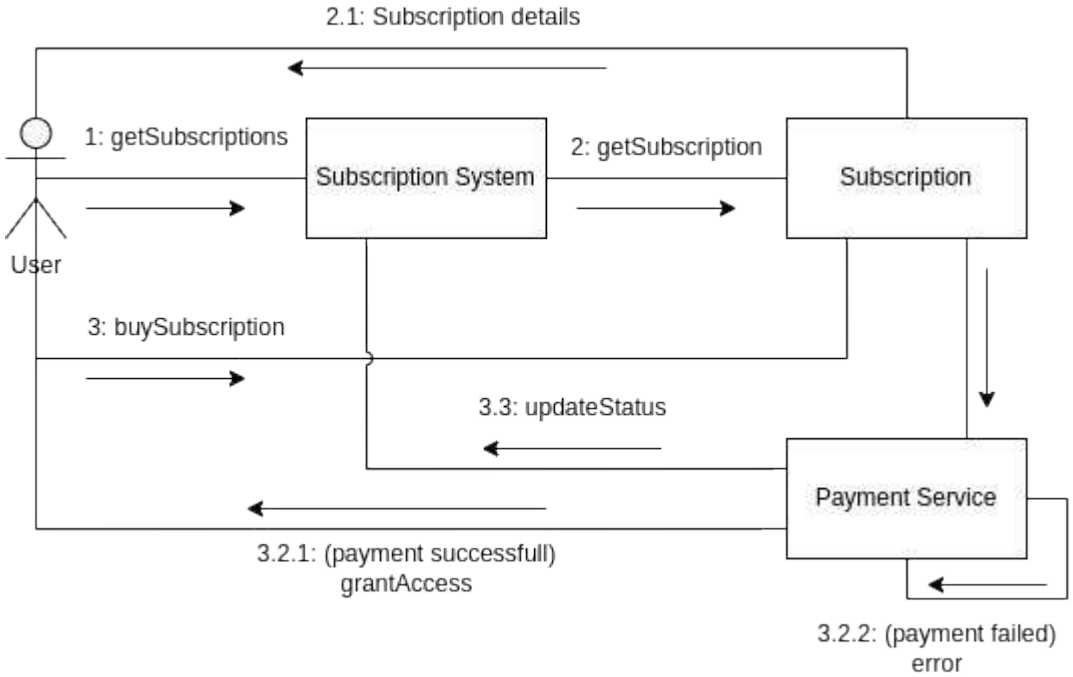


Fig 6. Communication diagram for Purchase Subscription.

6.2 Use case: Purchase Merchandise

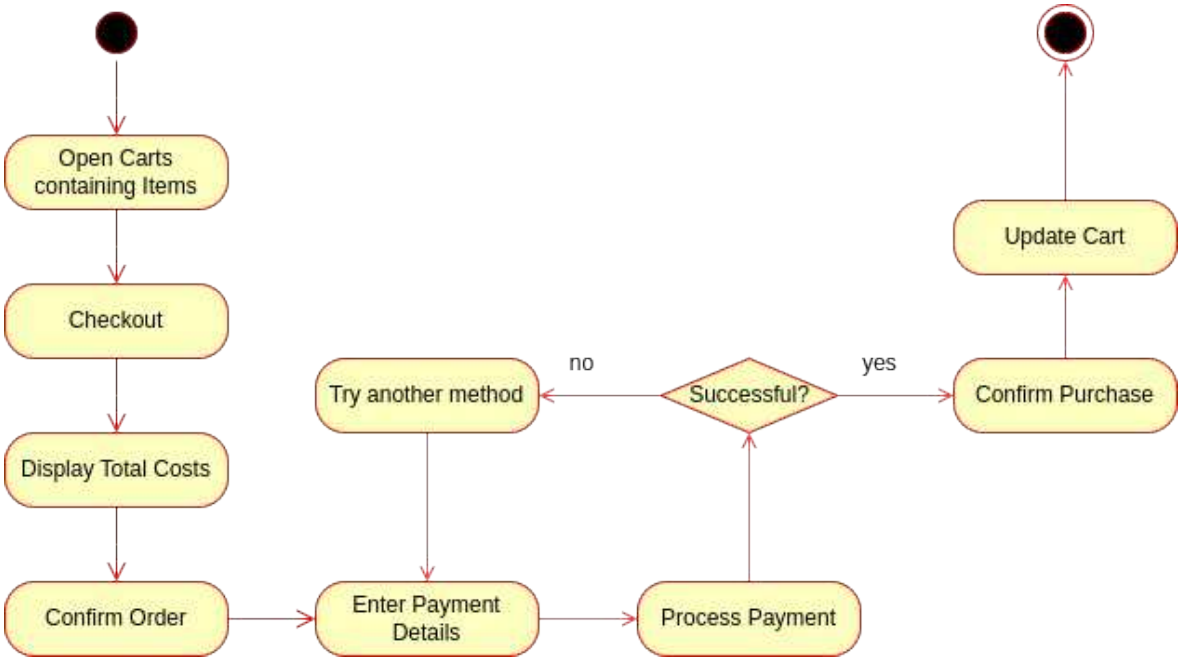


Fig 7. Activity diagram for Purchase Merchandise.

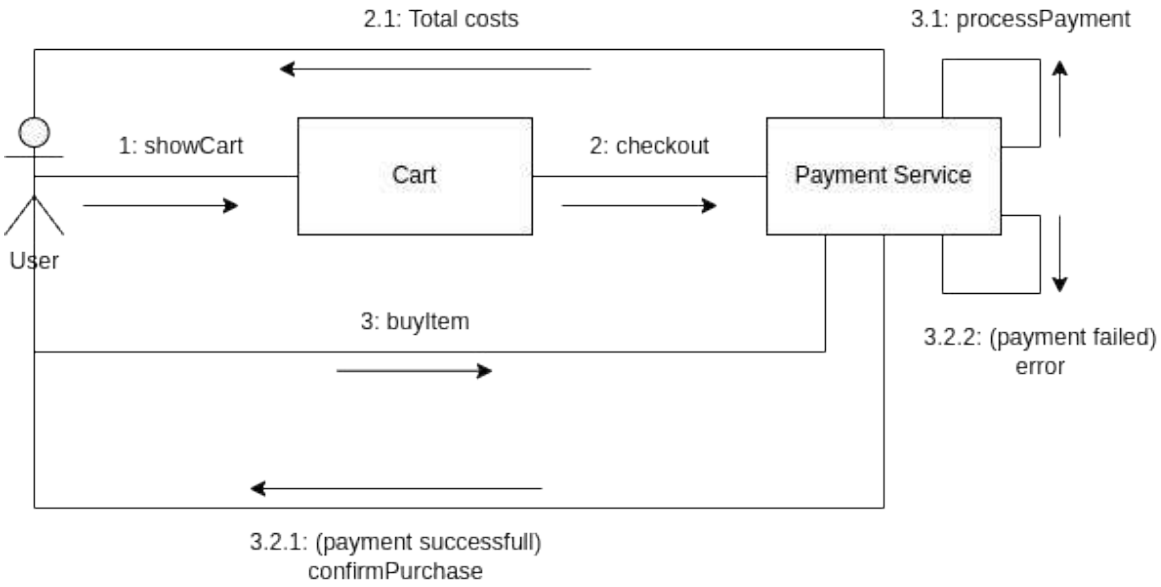


Fig 8. Communication diagram for Purchase Merchandise.

6.3 Use case: Join Audio Room

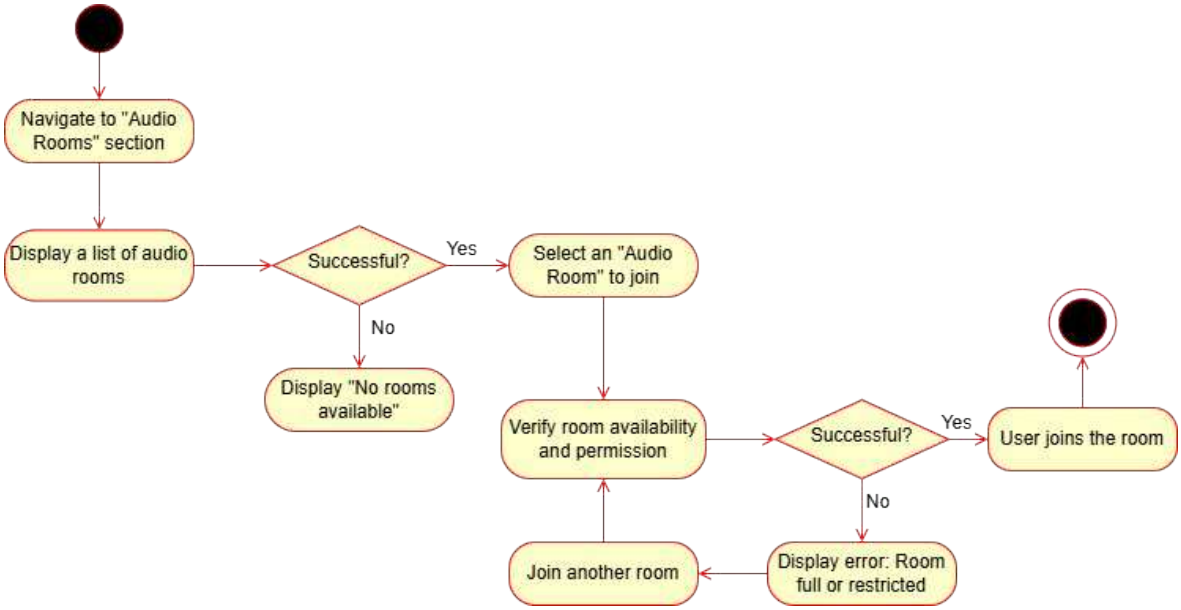


Fig 9. Activity diagram for Join Audio Room.

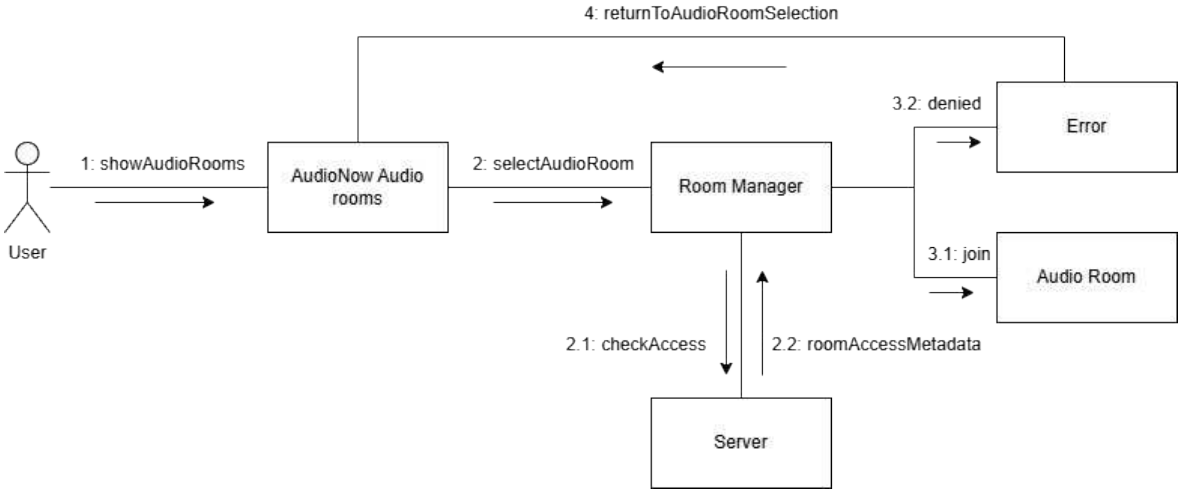


Fig 10. Communication diagram for Join Audio Room.

6.4 Use case: Create Audio Room

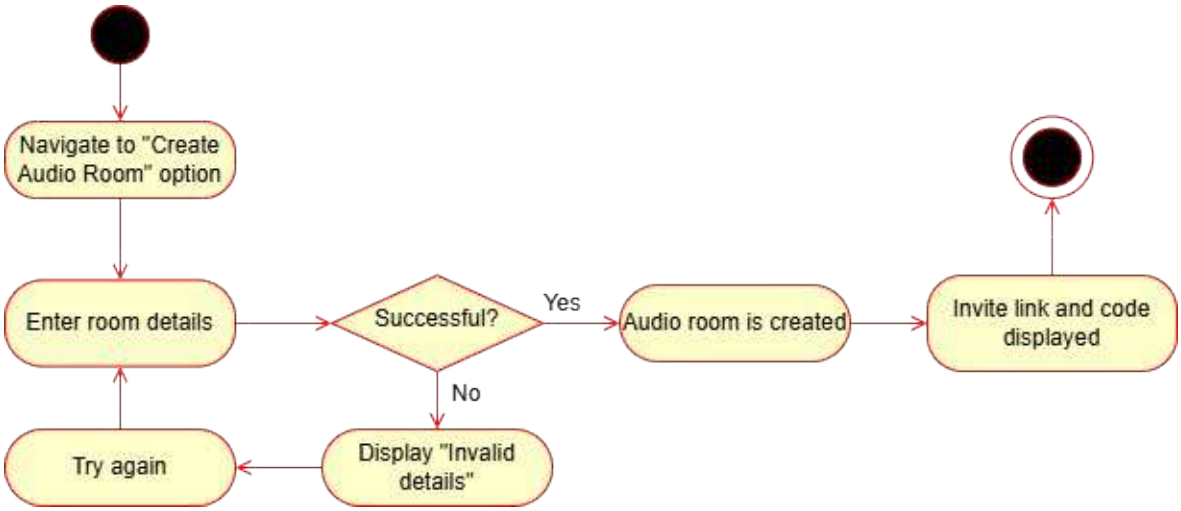


Fig 11. Activity diagram for Create Audio Room.

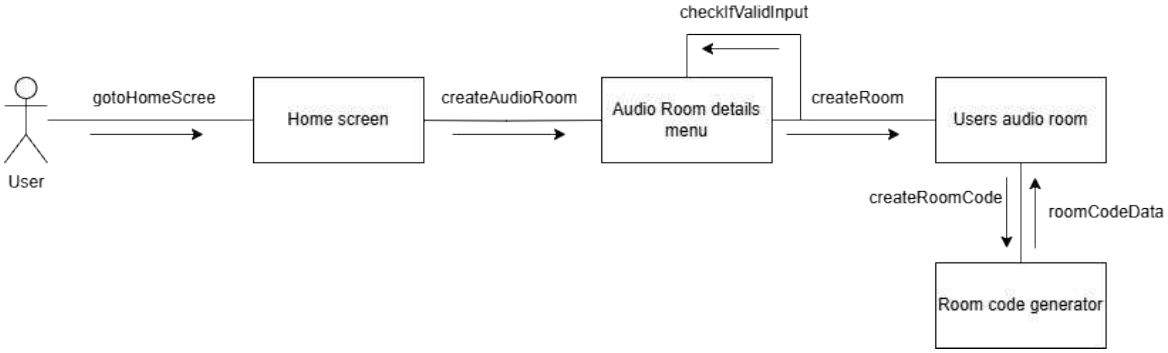


Fig 12. Communication diagram for Create Audio Room.

6.5 Use case: Manage Podcasts and Promotions

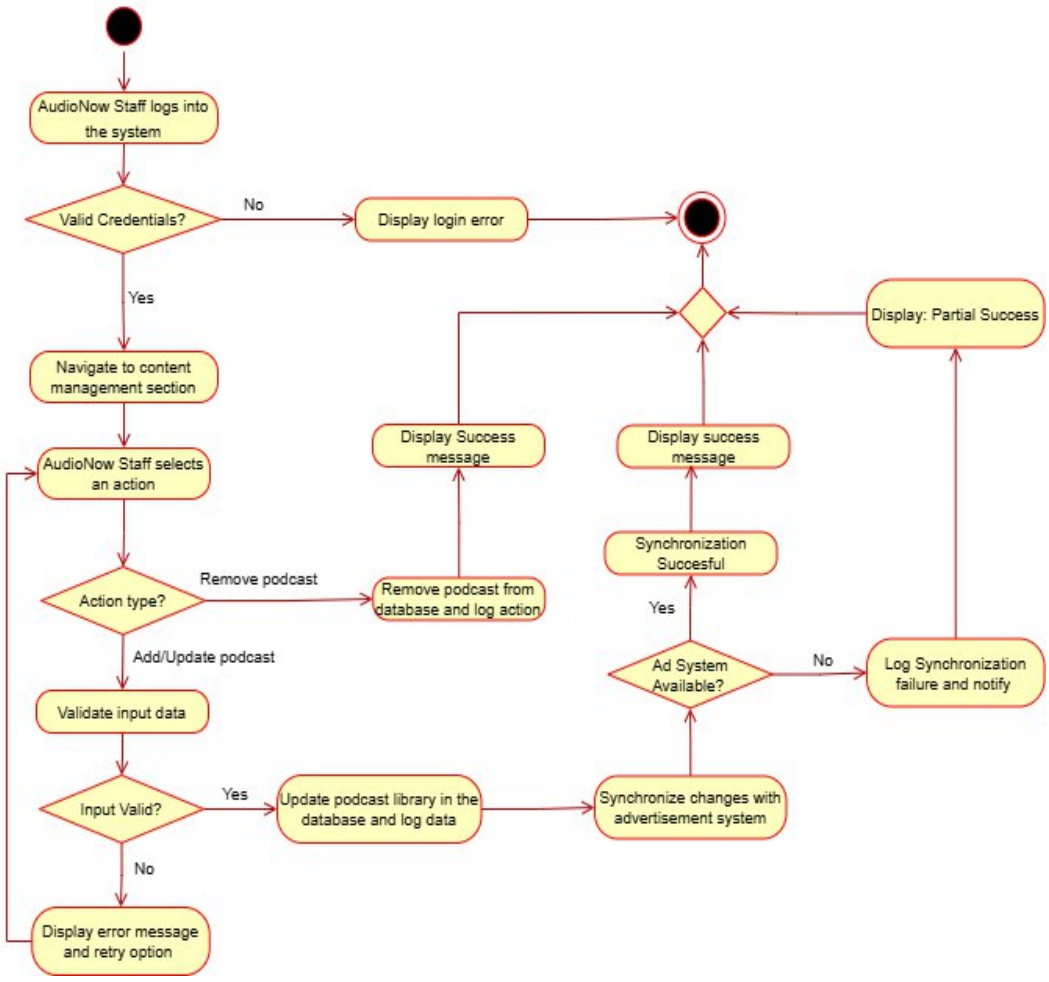


Fig 13. Activity diagram for Manage Podcasts and Promotions.

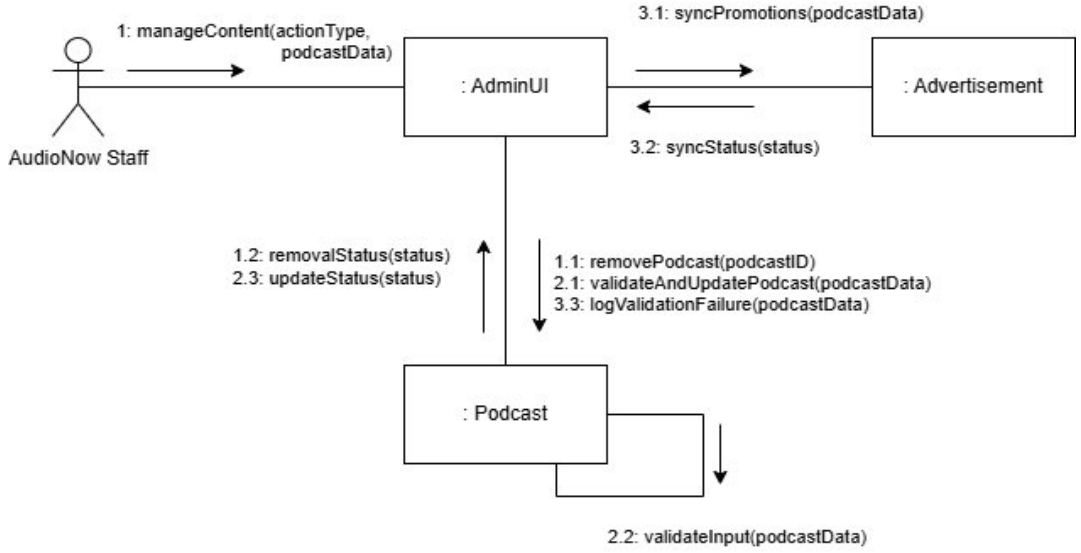


Fig 14. Communication diagram for Manage Podcasts and Promotions.

6.6 Use case: Sync Order and Update Inventory

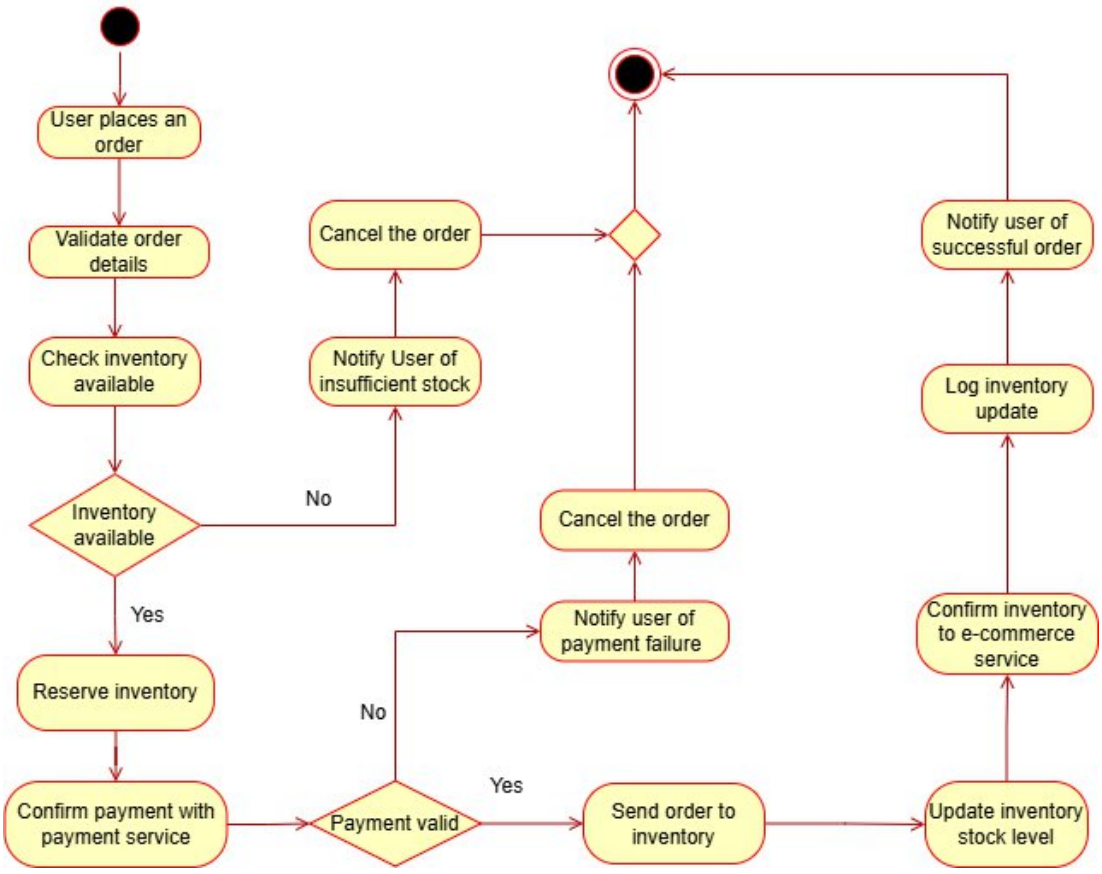


Fig 15. Activity diagram for Sync Order and Update Inventory.

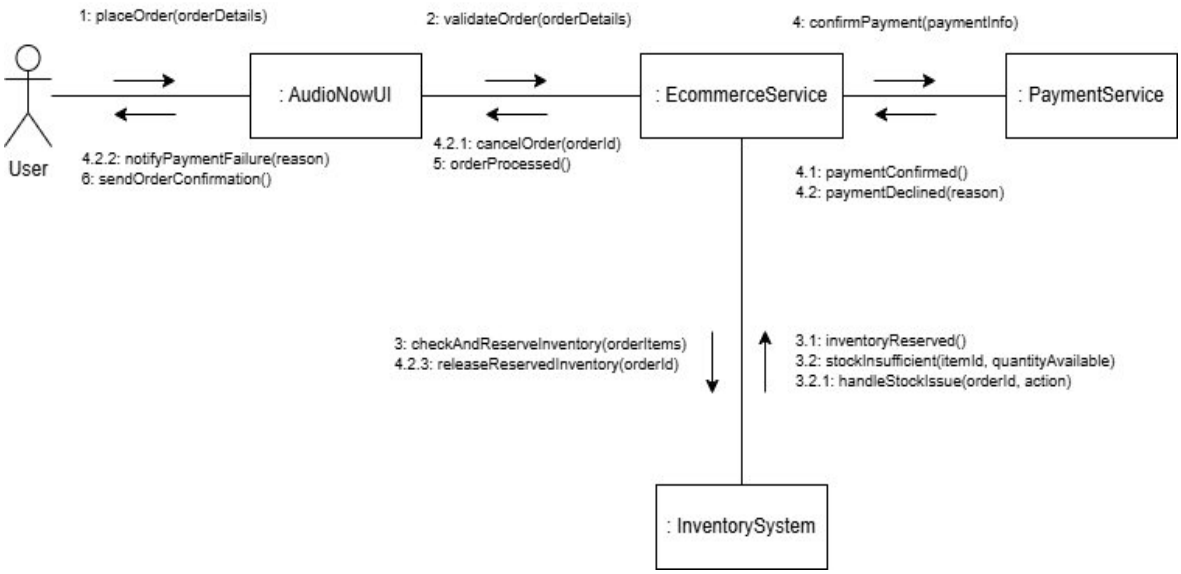


Fig 16. Communication diagram for Sync Order and Update Inventory.

7 RISK ANALYSIS

7.1 Risk Table: AudioNow

Identified Hazard	Hazard Probability	Accident Severity	Estimated Risk	Acceptability
Database server failure leading to data loss.	Medium	High	High	ALARP
Network congestion causing streaming interruptions.	Medium	Medium	Medium	ALARP
Advertisement system misplacing ads, reducing revenue.	Low	Low	Low	Acceptable
Hardware exhaustion during peak times.	High	High	High	ALARP
Data corruption during sync with external systems.	Medium	Medium	Medium	ALARP

The hazards identified in the above table could have significant impacts in AudioNow system. These can be described as follows:

1. **Database Server Failure Leading to Data Loss:** This hazard affects users' trust and dependability as they are likely to lose vital information such as songs in their playlists or accounts which will eventually lead to lose customers and revenues.
2. **Network Congestion Causing Streaming Interruptions**: Streaming interruptions from network issues affect user experience, potentially driving users away and harming AudioNow's reputation.
3. **Advertisement System Misplacing Ads, Reducing Revenue**: Incorrectly placed advertisements tend to lower the confidence of the advertisers and consequently, reduce their earnings but the overall risk is not as large as other hazards.
4. **Hardware Exhaustion During Peak Times**: During high network traffic, if the hardware is unable to cope with the situation, the system may hang or respond slowly, which severely limits user access and affects revenue.
5. **Data Corruption During Sync with External Systems**: Corrupted data affects billing and reporting which degrades operational efficiency and affects users trust over the system.

7.2 Fault Analysis Tree:

Here's the fault-tree analysis focused on the database server (RDS) failure hazard, which directly corresponds to the Risk 1 in the Risk Table: "Database server failure leading to data loss."

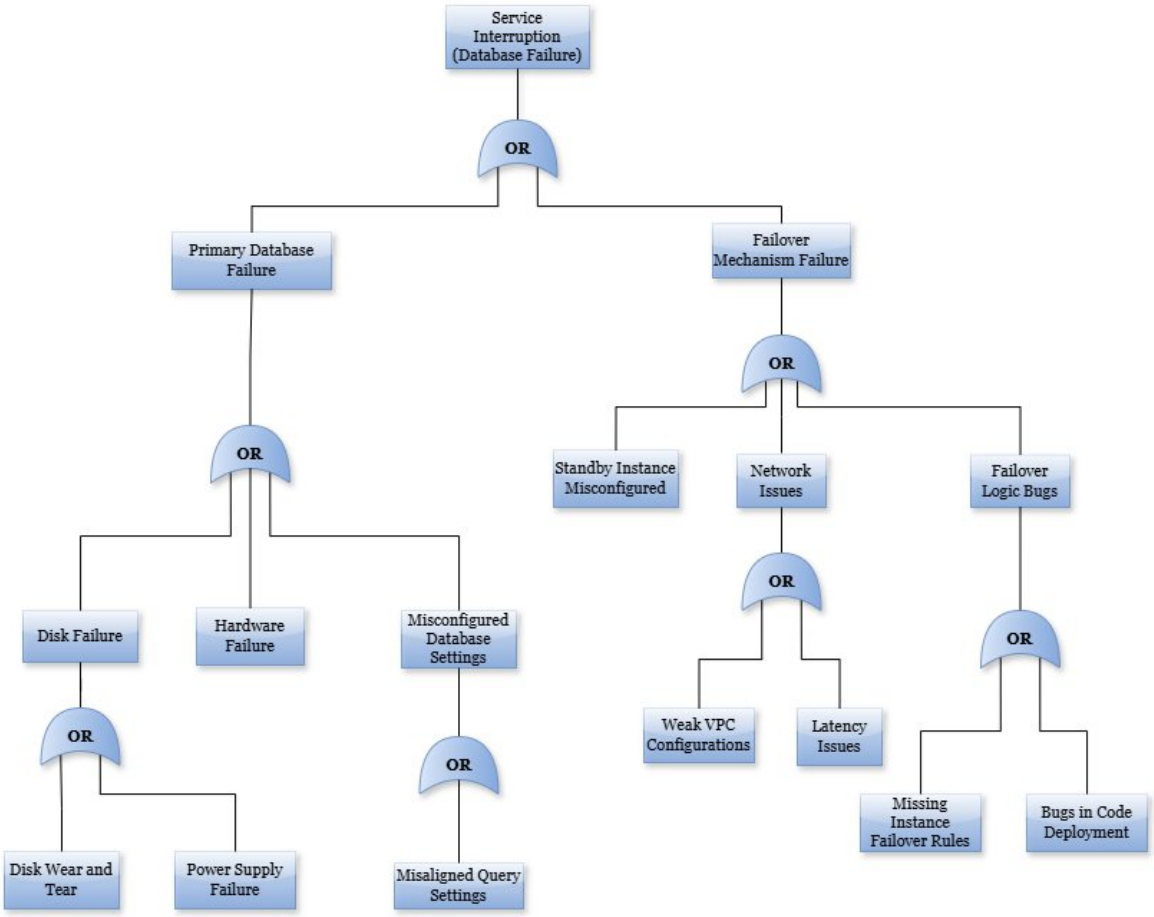


Fig 17. Fault Tree Analysis.

The possible conditions that can lead to Database Server Failure Leading to Data Loss:

- **Primary Database Hardware Failure**: Hardware failure can cause primary Amazon RDS instance unresponsive.
- **Failure to Switch to Standby Instance**: Failure of automated failover mechanism to switch to a Multi-AZ standby instance due to misconfiguration or software issues.

By analysis of the fault tree, root causes of the hazards related to “Database Server Failure Leading to Data Loss” are as follows:

For Primary Database Hardware Failure:

- **Disk Failure or Resource Exhaustion**: Primary database loses the ability to store or process any data because it’s hardware gets exhausted or overutilized.
- **Physical Hardware Malfunction**: Underlying failure that occurred in the hardware infrastructure of the Availability Zone supporting the database instance.

For Failure to Switch to Standby Instance:

- **Standby Instance Misconfiguration**: This problem is caused by errors in installation of standby instance’s hardware or improper maintenance of them. It hinders the system to switch to standby instance whenever it is needed.
- **Network Latency Issues**: If any network or connectivity issues occurs between the primary and the standby instance during the transition it can disrupt the standby instance to take over the authority.
- **Software Bugs in Failover Logic**: If there is an error in the code or a rule is missing in the program which transfers responsibilities to a standby instance, can hamper the process of transferring the job smoothly to the standby instance.

8 PROJECT PLAN AND SCHEDULE

The Iterative Development Model was selected for several reasons. First, it allows our development teams to build and refine the system by iterations, with feedback at the end of each iteration. Furthermore, this approach ensures frequent reviews and adjustments based on the client's inputs, as required by our partner MediaFun. Finally, with this method, we can deliver a proof-of-concept (PoC) early, reserving the final month for quality assurance (QA).

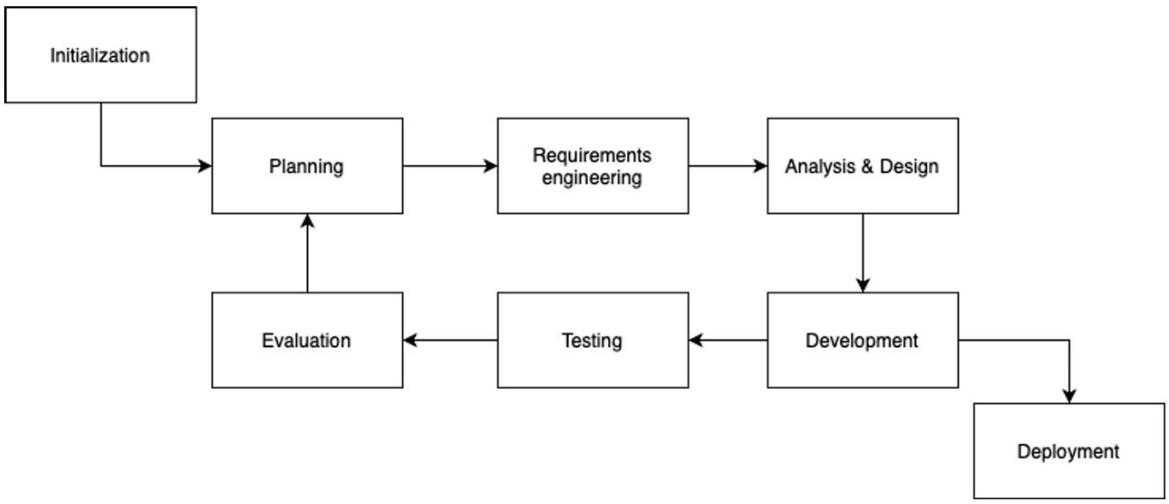


Fig 18. Process model for AudioNow.

Each step in this process could be summarized as follows:

1. Initialization: Here a base version of the system is created. This initial implementation provides a simple solution that users can react to and helps identify key aspects of the problem.
2. Planning & Requirements Engineering: At this stage, we map out the specification documents, establish software or hardware requirements, and generally prepare for the upcoming stages of the cycle.
3. Analysis & Design: Next, an analysis is performed to specify the appropriate business logic, database models, and the like that will be required at this stage in the project. The design stage also occurs here, establishing any technical requirements (languages, data layers, services, etc.) that will be utilized in order to meet the needs of the analysis stage.
4. Development: This is the stage where actual implementation and coding process can begin. All planning, specification, and design documentation up to this point are coded and implemented into this initial iteration of the project.

5. Testing: Once development is done, a series of testing procedures is carried out to identify and locate any potential bugs or issues that might arise.
6. Evaluation: At the end of each iteration, a thorough evaluation is executed, which allows the entire team, as well as our client, to examine where the project is at, where it needs to be, what can or should change, and so on.
7. Deployment: This stage is the final stage. Here the project is implemented into production after the stakeholders are happy with the project, and enough iterations have been done.

8.1 Deadlines and milestones

The overall schedule is 12 months, and the following table will detail the exact milestones we have planned for this project.

Milestone	**Timeframe (months)**	**Deliverables**
Project Initialization	0-1	Project Plan (schedule, milestones, resource allocation), Requirements Specification (functional and non-functional requirements)
Proof of concept (PoC)	1-2	PoC Documentation (demo functionality, limitations, feedback), initial UI/UX Prototypes
Iteration 1 completion	2-4	Iteration Documentation (progress and implementation notes), Architecture Document (system components, APIs, database schema)
Iteration 2 completion	4-6	Updated Iteration Documentation, expanded Test Reports (manual, automated, and performance testing results)
Alpha release	6-8	Fully functional Alpha System, QA Report (final system testing results), updated UI/UX Prototypes
User acceptance testing	8-10	User Acceptance Testing (UAT) Report (feedback and last-minute changes), final Test Reports (security, scalability, user experience)
Pilot testing and feedback	10-12	Feedback Summary Report (pilot testing results), improvements roadmap
Project wrap up	End of 12th month	Delivery Documentation (installation guides, user manuals, system configuration)

8.2 Resources

For the successful completion of the AudioNow project, several tools and resources are required across human, software, and hardware domains.

- Human resources include a development team composed of software engineers, UI/UX designers, and quality assurance (QA) testers. Additionally, a project manager is needed to oversee progress and ensure alignment with client requirements, while a business analyst can provide insights into user needs and market trends.
- Software tools encompass integrated development environments (IDEs) such as Visual Studio Code, version control systems like GitHub, and project management platforms such as Jira.
- Design tools like Figma will support UI/UX prototyping, while the testing framework JUnit will facilitate manual and automated testing.
- For backend development and deployment, services like Azure will be leveraged to provide scalable infrastructure, databases, and APIs.
- Hardware resources include development machines for team members, test devices to emulate user environments (e.g., smartphones, tablets, laptops), and servers to host the system during development and testing stages. These tools and resources ensure that the project progresses efficiently through iterations.

8.3 Testing and metrics

8.3.1 Testing process

The testing process is carried out during 3 steps of each iteration. At the development phase, unit testing, integration testing, and system testing are performed. They will collect code coverage and return results for each test. During the actual testing phase, select user groups and testers will test different features for useability, stability, and performance. They will deliver bug reports and performance benchmarks. For the quality assurance phase, detailed tests such as stress testing, load testing, security audits are brought in. They will reveal any vulnerabilities and potential bugs. Final bug fixes are also implemented at this phase.

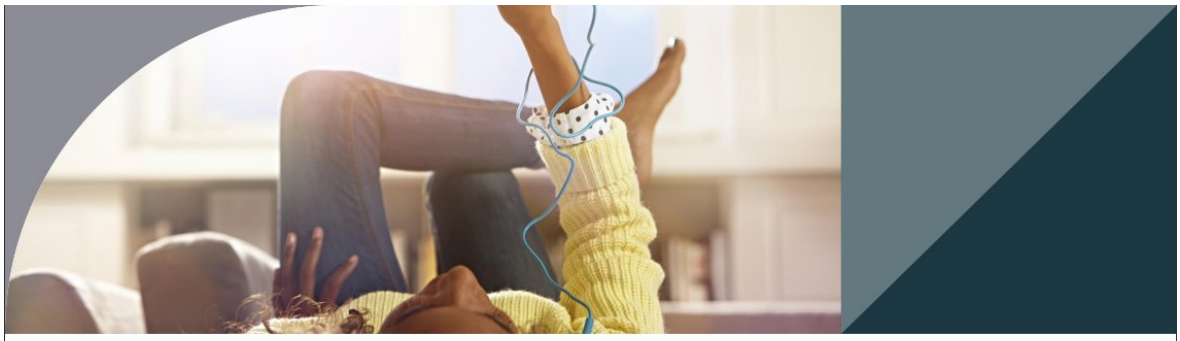
8.3.2 Reporting process

After each iteration, developers deliver progress updates to the consultancy. Furthermore, after every testing cycle, a summarized test report, which included all issues encountered and their fixes, is produced and sent to the consultancy. For the consultancy, they are responsible for organizing monthly progress reviews with MediaFun. These sessions include demonstrations, testing results, and feedback collection. Detailed reports are produced to be used in the next iteration.

9 PROJECT PITCH AND CONCLUSIONS

The MediaFun system is designed to address key gaps in the entertainment industry by providing a personalized, seamless, and flexible user experience. Its innovative features, such as AI-driven recommendations, cross-device compatibility, and collaborative playlists, make it highly appealing to modern audiences. However, potential challenges include meeting stringent client requirements, such as ensuring system scalability and maintaining a robust performance under high user traffic. Additionally, securing content partnerships and managing competition from established platforms could pose hurdles. Despite these challenges, MediaFun’s adaptable architecture and focus on user engagement position it as a strong contender in the market.

APPENDIX: Pitching deck

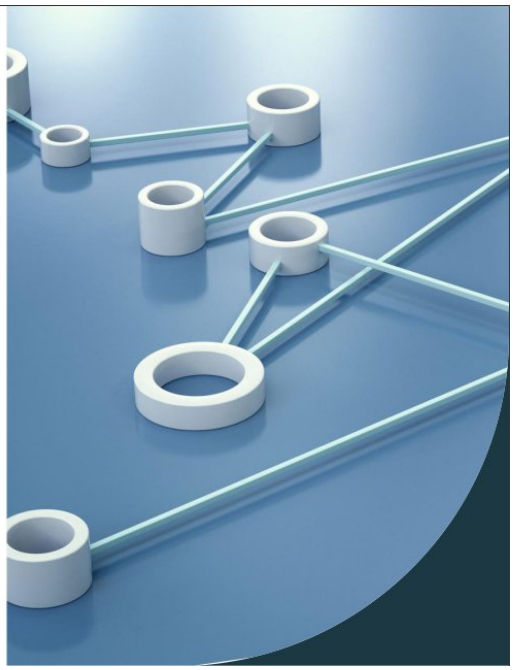


AudioNow
Redefining Entertainment Delivery

Innovative Content Streaming for Modern Audiences

Executive Summary

AudioNow by MediaFun is an innovative platform that revolutionizes entertainment delivery by addressing key gaps in personalization, accessibility, and engagement. This presentation will showcase how AudioNow solves these challenges through advanced features, creating tangible benefits for users while standing out against competitors. We will outline our approach, benefits, and project roadmap, demonstrating why AudioNow is the right solution for today's entertainment market.



Need
Addressing the Market Gap

- Current Challenges:
  - Users face platform fatigue due to overwhelming content options and lack of personalization.
  - Existing platforms have limited cross-device compatibility and lack seamless engagement features.
- Market Opportunity:
  - The global streaming industry is projected to grow to $150 billion by 2030.
  - Users increasingly demand smarter, personalized, and eco-friendly content delivery solutions.

MediaFun addresses these unmet needs to deliver a superior entertainment experience.

Approach
The AudioNow Solution

Personalized AI-Driven Content Suggestions: Curated playlists and content recommendations based on user preferences.

Seamless Cross-Device Compatibility: Continue watching or listening across devices without interruptions.

Flexible Subscription Tiers: Ad-based free plans, standard subscriptions, and premium ad-free content.

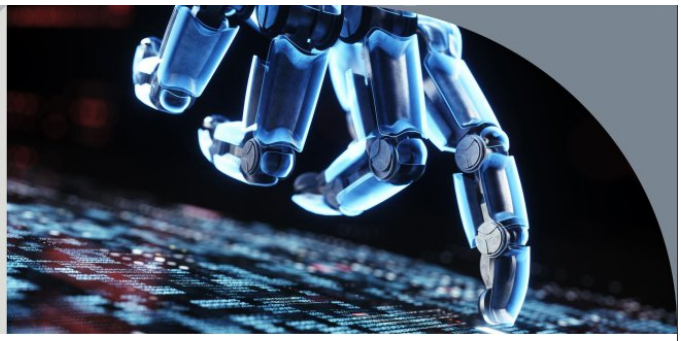
Collaborative Playlists: Users can co-create playlists with friends for shared experiences.

IoT Integration: Sync with smart devices for immersive experiences, like ambient lighting based on content.

Benefits

What Sets AudioNow Apart

Users	Personalized recommendations reduce decision fatigue. Flexible subscription models cater to different budgets. Cross-device compatibility ensures seamless experiences.
Clients	Increased user engagement leads to higher retention rates. Eco-friendly optimizations appeal to environmentally conscious customers. A scalable platform for future feature expansions ensures long-term value.



Competition

Our Market Position

- **Competitors:** Netflix, Spotify, Disney+, emerging platforms.
- **AudioNow's Competitive Edge:**
  - Advanced personalization powered by AI.
  - Collaborative and interactive features that foster social engagement.
  - Affordable tiers targeting underserved segments of the market.

With these differentiators, AudioNow is positioned to disrupt the streaming industry and capture a significant market share.

Project Plan

Month 1-8
- Development of Core Features
- Alpha Release

Month 10-12
- Beta Testing with Select Users

End of Month 12
- Public Release
- Promotional Campaigns

Financial Overview

- Estimated Costs:
  - Development: $500,000
  - Marketing: $200,000
  - Operations: $100,000/year
- Revenue Model:
  - Subscriptions: $9.99/month (standard), $14.99/month (premium).
  - Ad-based revenue: $0.02/ad view.
- ROI Expectation: Break-even within 18 months, with 20% annual growth thereafter.

Risk Assessment and Mitigation

Key Risks:

- Competition from established platforms.
- Delays in technology implementation.

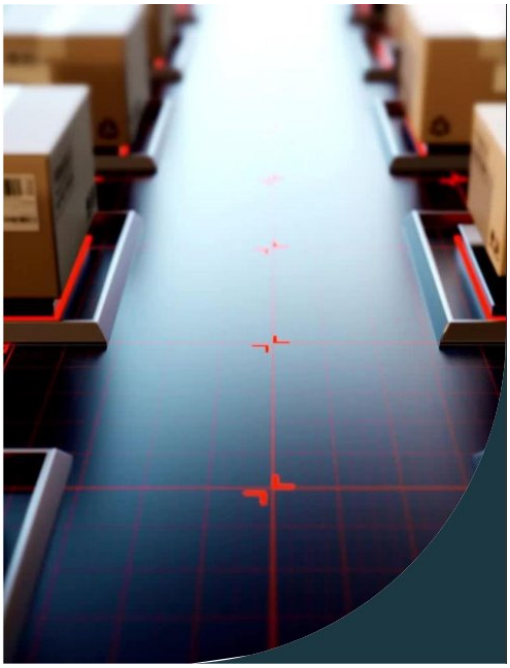
Mitigation Strategies:

- Proactive upgrades to stay ahead of competitors.
- Agile methodology to minimize delays.
- Strategic partnerships for content licensing and advertisements.

Call to Action

AudioNow is your solution to transforming entertainment delivery. With a cutting-edge approach, proven benefits, and a scalable roadmap, AudioNow is ready to captivate audiences and dominate the market.

- **Our Ask:** Approval to proceed to the next phase with funding.
- **Next Steps:** Finalizing MVP and launching beta testing.



Q&A

Thank you for your attention.

We are happy to answer any questions and discuss how MediaFun can meet your needs.