

CT60A5103 Software Engineering Models and Modeling

# **AudioNow**

**Simplified Domain Model, Use Case Diagram, BCE Diagram**

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## Simplified Domain Model

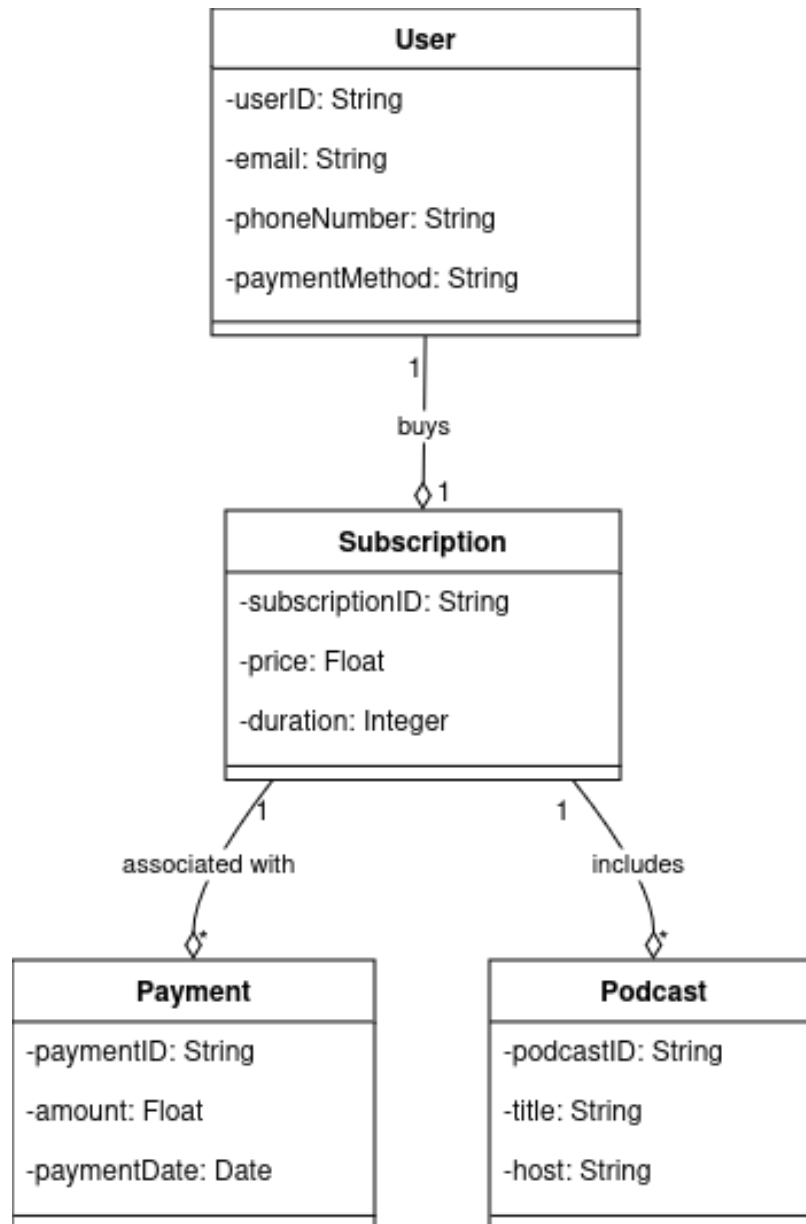


Fig 1. Simplified domain model for how purchasing subscription for AudioNow works.

The domain model illustrates the core entities involved in the process of buying a subscription on AudioNow. The relationships between entities such as User, Subscription, Payment, and Podcast define how the user interacts with the system to purchase a subscription, make a payment subscribe to a podcast.

## Use Case Diagram

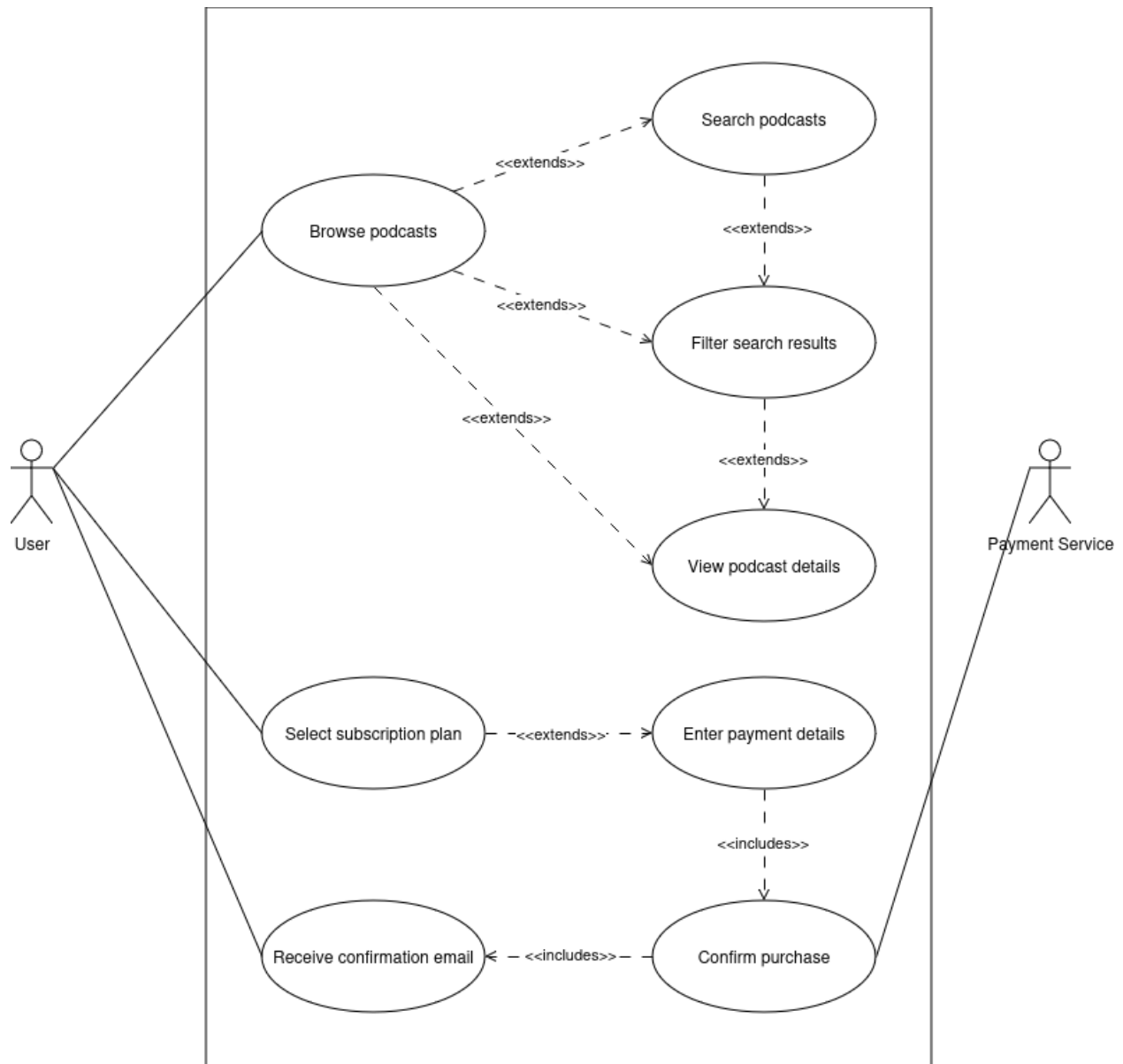


Fig 2. Use case diagram for the podcast subscription payment of AudioNow.

The use case diagram provides an overview of the actions the user takes to complete a purchase of a podcast subscription. The diagram focuses on the primary interaction steps such as browsing, selecting a plan, and processing the payment. The use of <<include>> and <<extend>> relationships help distinguish between required and optional steps in the process of buying a podcast subscription.

## Boundary - Entity - Controller Diagram

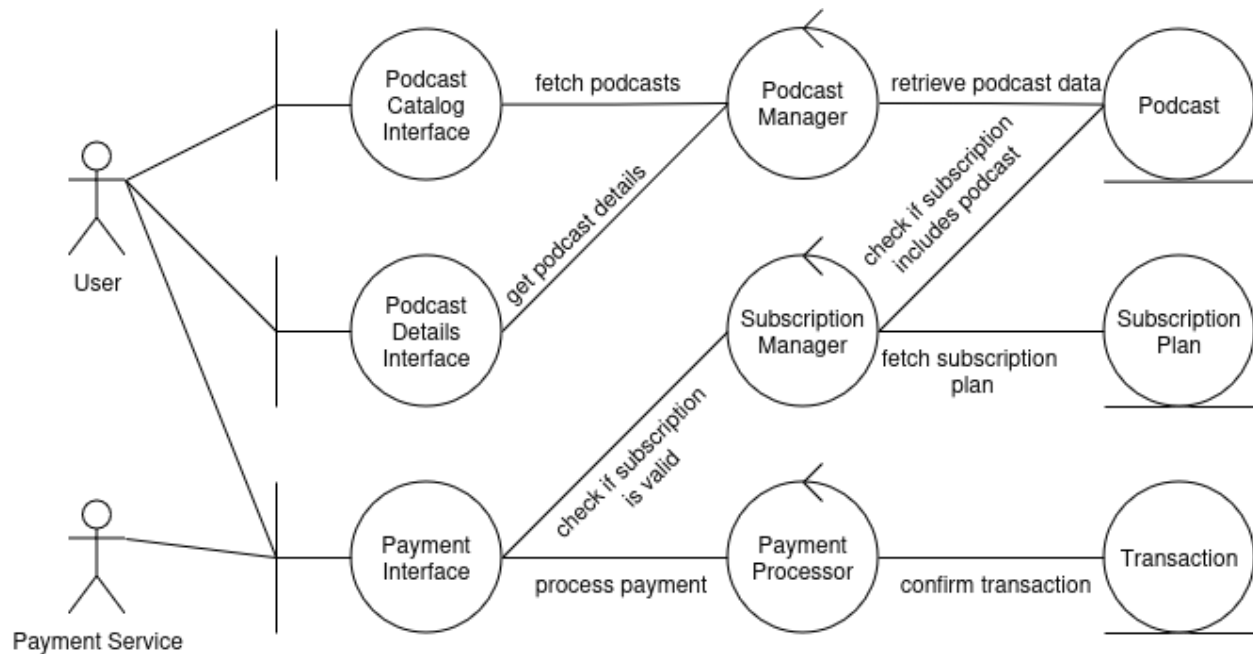


Fig 3. BCE diagram for AudioNow of how different features interact with each other.

The BCE diagram presents different tasks of each entity involved in the process. The User interacts with boundary objects to browse podcasts and purchase subscriptions. The Podcast Manager and Subscription Manager handle fetching podcast and subscription data, while the Payment Processor manages payment processing with the external Payment Service. Entities like Podcast, Subscription Plan, and Transaction store essential data.

### DECLARATION OF AI USAGE

ChatGPT was used for proofreading this document.