

# Software Application: Spotify

## 1. Key Spotify Components

- Client Applications (Mobile, Web, Desktop)
- Backend Service (Handles business logic)
- Authentication Service (User login/SSO)
- Playlist/Library Management
- Streaming Service (Audio delivery)
- Recommendation Engine (AI/ML suggestions)
- Database (User data, metadata, analytics)
- Third-Party Integrations (Payment gateways, social media)

## 2. Component Relationships

- Users interact with Client Apps.
- Client Apps communicate with Backend Service via REST/WebSocket APIs.
- Backend Service coordinates with:
  - Authentication Service for user verification.
  - Playlist Management for library updates.
  - Streaming Service for audio delivery.
  - Recommendation Engine for personalized content.
  - Database for data storage/retrieval.
- Third-Party Integrations handle payments (Stripe/PayPal) and social sharing.