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Course name – B.tech cse

College name – Quantum university, Roorkee

Batch no- 1

Task no- 2

Task name - ✓ Identify and fix any product.

✓ Explore its features.

✓ Prepare an empathy process flow as a flowchart.

**Step 1: Identify a Product with Issues**

I’ve chosen **Spotify** for this task, as it is a widely used product but has some common usability and feature-related issues. This will allow for a meaningful analysis.

**Why Spotify?**

* Spotify is one of the leading music streaming platforms, but it has faced criticism for issues like **poor song recommendations**, **frequent app crashes**, and **lack of certain customization options**.
* It’s a familiar product, making it easy to understand the user flow and propose fixes.

**Step 2: Issues Identified and Suggested Fixes**

| **Issue** | **Description** | **Suggested Fix** |
| --- | --- | --- |
| **Inaccurate Song Recommendations** | The "Discover Weekly" playlist often recommends unrelated or repeated songs. | Improve the recommendation algorithm using better ML models and refine the collaborative filtering process. |
| **Frequent App Crashes** | Many users report crashes on Android and iOS, especially after updates. | Optimize memory management and test stability before new updates. |
| **Limited Search Filters** | The search lacks robust filtering, making it hard to find specific genres or moods. | Add advanced search filters (mood, language, tempo). |
| **Lack of Equalizer on Desktop** | The desktop app lacks an equalizer, unlike the mobile version. | Introduce an equalizer for the desktop app to match the mobile experience. |
| **No Lyrics for Some Songs** | Lyrics are missing for many songs, despite being a standard feature. | Partner with more lyrics providers to cover more songs. |

**Step 3: Exploring Spotify’s Features**

Here’s a detailed exploration of **Spotify’s key features**:

**1. Music Library**

* **Extensive Catalog:** Offers millions of songs and podcasts.
* **Playlists:** Users can create, follow, and share playlists.
* **Personalized Recommendations:** Playlists like *Discover Weekly* and *Release Radar* based on listening habits.

**2. User Interface and Navigation**

* **Mobile & Desktop App:** Clean, intuitive design with dark mode.
* **Search Function:** Find songs, artists, albums, or podcasts.
* **Now Playing Bar:** Displays the current track with playback controls.

**3. Personalized Features**

* **Made for You:** Custom playlists based on listening history.
* **Daily Mixes:** Pre-curated playlists matching the user’s taste.
* **Spotify Wrapped:** Year-end listening summary.

**4. Audio Quality & Equalizer**

* **Sound Quality:** Offers options like *Normal*, *High*, and *Very High* (320 kbps).
* **Equalizer:** Available only on mobile, allowing users to customize sound settings.

**5. Social Features**

* **Collaborative Playlists:** Users can share and edit playlists with friends.
* **Friend Activity Feed:** Shows what friends are listening to.
* **Spotify Connect:** Seamless switching between devices.

**Step 4: Empathy Process Flowchart**

The empathy process focuses on **understanding the user’s journey**, identifying pain points, and offering solutions. Here’s a detailed flowchart:

**Flowchart Description**

* **Start:** The user opens Spotify.
* **Login/Signup:** User either logs in or signs up.
* **Browsing & Discovery:** The user browses or uses recommendations to find music.
  + **Pain Point:** Inaccurate recommendations → Fix: Improve ML algorithm.
* **Playing Songs:** User plays songs and interacts with playback controls.
  + **Pain Point:** App crash during playback → Fix: Stability improvements.
* **Search Experience:** User searches for songs, albums, or artists.
  + **Pain Point:** Limited filters → Fix: Advanced filtering options.
* **Playlist & Library Management:** User creates or manages playlists.
  + **Pain Point:** Missing lyrics → Fix: Add more lyrics providers.
* **End:** The user continues listening or closes the app.

**Flowchart Visualization**

Here’s a visual representation of the empathy process flowchart:

pgsql

CopyEdit

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| User Opens App |

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| Login / Signup |

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| Browse/Discover Music |

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+--------------------------+

| Inaccurate Recommendations |

| → Improved ML Algorithm |

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+----------------------+

| Play Songs & Control |

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+--------------------------+

| App Crashes |

| → Optimize Stability |

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| Search for Music |

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| Limited Search Filters |

| → Add Advanced Filter Options |

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| Playlist Management |

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+--------------------------+

| Missing Lyrics |

| → Partner with More Providers |

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| User Closes App |

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