ICS 321 Data Storage & Retrieval - Ex#1   Name:_____

You have a large collection of royalty-free specialty music files (in MP3 format) and you decided to start an on-line business selling these music files. You have a modest server with 1GB of memory connected to the internet and running a web server. Since you know almost nothing about database software, you decided to team up with your computer science friends to develop a web-based music store application without any database software. The music store would support multiple concurrent users, and each user should be able to

- browse and search through the music collection,
- add music files to their shopping cart,
- checkout and pay for music files in their shopping carts using credit cards, and
- browse through their previous purchases (a music file will forever be accessible to the user after he/she pays for it).

Discuss the high-level steps you would need to implement such a music store application. No code is required and you may assume that you may use any programming language. The following questions may jumpstart your discussion.

1. What data needs to be managed by the application ?
2. What data structures are needed ?
3. How much data is expected ?
4. ...

Task.   List all the challenges and difficulties in programming such an application.