# Overview

Create a restful API using .NET that will parse a CSV file with transaction data from various applications. The API should be able to:

1. Read a CSV file (Examples provided), validate the data and persist the information.
   * File can include either new transactions or update existing transactions
   * Feel free to choose any (not in-memory) database you see fit
2. Fetch all transactions paginated, using the transaction’s date as sorting field. User should be able to select page and/or number of transactions per page
3. Delete a transaction
4. Upsert a transaction
5. Fetch a transaction

## Data specification

|  |  |
| --- | --- |
| Name | Details |
| Id | Mandatory, a unique identifier for the transaction. GUID, assigned by the API upon saving the transaction |
| ApplicationName | Mandatory, the name of the application that was used to record the transaction. Cannot exceed 200 characters |
| Email | Mandatory, the user’s email. Cannot exceed 200 characters. |
| Filename | Optional, the name of a file attached to the transaction. Cannot exceed 300 characters. Valid extensions: png, mp3, tiff, xls, pdf |
| Url | Optional, the URL of the external application. When provided, should be a valid URL |
| Inception | Mandatory, the transaction’s date. Should be in the past |
| Amount | Mandatory, amount with currency. An existing transaction cannot change currency |
| Allocation | Optional, a positive decimal between 0-100 |

### CSV

Csv file will include headers.

### Requirements

Application should be structured into logical layers. Final code should be production ready. Errors should be handled gracefully.