🏠 Modules   Data connection   Document loaders   CSV

CSV

> A comma-separated values (CSV) file is a delimited text file that uses a comma to separate values. Each line of the file is a data record. Each record consists of one or more fields, separated by commas.

Load CSV data with a single row per document.

```
from langchain.document_loaders.csv_loader import CSVLoader


loader = CSVLoader(file_path='./example_data/mlb_teams_2012.csv')
data = loader.load()
```

```
print(data)
```

```
    [Document(page_content='Team: Nationals\n"Payroll (millions)":
81.34\n"Wins": 98', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 0}, lookup_index=0),
Document(page_content='Team: Reds\n"Payroll (millions)": 82.20\n"Wins":
97', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 1}, lookup_index=0),
Document(page_content='Team: Yankees\n"Payroll (millions)":
197.96\n"Wins": 95', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 2}, lookup_index=0),
Document(page_content='Team: Giants\n"Payroll (millions)":
117.62\n"Wins": 94', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 3}, lookup_index=0),
Document(page_content='Team: Braves\n"Payroll (millions)":
83.31\n"Wins": 94', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 4}, lookup_index=0),
Document(page_content='Team: Athletics\n"Payroll (millions)":
55.37\n"Wins": 94', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 5}, lookup_index=0),
Document(page_content='Team: Rangers\n"Payroll (millions)":
120.51\n"Wins": 93', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 6}, lookup_index=0),
Document(page_content='Team: Orioles\n"Payroll (millions)":
81.43\n"Wins": 93', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 7}, lookup_index=0),
```

```
Document(page_content='Team: Rays\n"Payroll (millions)": 64.17\n"Wins":
90', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 8}, lookup_index=0),
Document(page_content='Team: Angels\n"Payroll (millions)":
154.49\n"Wins": 89', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 9}, lookup_index=0),
Document(page_content='Team: Tigers\n"Payroll (millions)":
132.30\n"Wins": 88', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 10}, lookup_index=0),
Document(page_content='Team: Cardinals\n"Payroll (millions)":
110.30\n"Wins": 88', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 11}, lookup_index=0),
Document(page_content='Team: Dodgers\n"Payroll (millions)":
95.14\n"Wins": 86', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 12}, lookup_index=0),
Document(page_content='Team: White Sox\n"Payroll (millions)":
96.92\n"Wins": 85', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 13}, lookup_index=0),
Document(page_content='Team: Brewers\n"Payroll (millions)":
97.65\n"Wins": 83', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 14}, lookup_index=0),
Document(page_content='Team: Phillies\n"Payroll (millions)":
174.54\n"Wins": 81', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 15}, lookup_index=0),
Document(page_content='Team: Diamondbacks\n"Payroll (millions)":
74.28\n"Wins": 81', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 16}, lookup_index=0),
Document(page_content='Team: Pirates\n"Payroll (millions)":
63.43\n"Wins": 79', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 17}, lookup_index=0),
Document(page_content='Team: Padres\n"Payroll (millions)":
55.24\n"Wins": 76', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 18}, lookup_index=0),
Document(page_content='Team: Mariners\n"Payroll (millions)":
81.97\n"Wins": 75', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 19}, lookup_index=0),
Document(page_content='Team: Mets\n"Payroll (millions)": 93.35\n"Wins":
74', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 20}, lookup_index=0),
Document(page_content='Team: Blue Jays\n"Payroll (millions)":
75.48\n"Wins": 73', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 21}, lookup_index=0),
Document(page_content='Team: Royals\n"Payroll (millions)":
60.91\n"Wins": 72', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 22}, lookup_index=0),
Document(page_content='Team: Marlins\n"Payroll (millions)":
118.07\n"Wins": 69', lookup_str='', metadata={'source':
```

```
'./example_data/mlb_teams_2012.csv', 'row': 23}, lookup_index=0),
Document(page_content='Team: Red Sox\n"Payroll (millions)":
173.18\n"Wins": 69', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 24}, lookup_index=0),
Document(page_content='Team: Indians\n"Payroll (millions)":
78.43\n"Wins": 68', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 25}, lookup_index=0),
Document(page_content='Team: Twins\n"Payroll (millions)":
94.08\n"Wins": 66', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 26}, lookup_index=0),
Document(page_content='Team: Rockies\n"Payroll (millions)":
78.06\n"Wins": 64', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 27}, lookup_index=0),
Document(page_content='Team: Cubs\n"Payroll (millions)": 88.19\n"Wins":
61', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 28}, lookup_index=0),
Document(page_content='Team: Astros\n"Payroll (millions)":
60.65\n"Wins": 55', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 29}, lookup_index=0)]
```

Customizing the csv parsing and loading

See the csv module documentation for more information of what csv args are supported.

```python
loader = CSVLoader(file_path='./example_data/mlb_teams_2012.csv',
csv_args={
    'delimiter': ',',
    'quotechar': '"',
    'fieldnames': ['MLB Team', 'Payroll in millions', 'Wins']
})

data = loader.load()
```

```python
print(data)
```

```
    [Document(page_content='MLB Team: Team\nPayroll in millions:
"Payroll (millions)"\nWins: "Wins"', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 0}, lookup_index=0),
Document(page_content='MLB Team: Nationals\nPayroll in millions:
81.34\nWins: 98', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 1}, lookup_index=0),
```

```
Document(page_content='MLB Team: Reds\nPayroll in millions:
82.20\nWins: 97', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 2}, lookup_index=0),
Document(page_content='MLB Team: Yankees\nPayroll in millions:
197.96\nWins: 95', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 3}, lookup_index=0),
Document(page_content='MLB Team: Giants\nPayroll in millions:
117.62\nWins: 94', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 4}, lookup_index=0),
Document(page_content='MLB Team: Braves\nPayroll in millions:
83.31\nWins: 94', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 5}, lookup_index=0),
Document(page_content='MLB Team: Athletics\nPayroll in millions:
55.37\nWins: 94', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 6}, lookup_index=0),
Document(page_content='MLB Team: Rangers\nPayroll in millions:
120.51\nWins: 93', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 7}, lookup_index=0),
Document(page_content='MLB Team: Orioles\nPayroll in millions:
81.43\nWins: 93', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 8}, lookup_index=0),
Document(page_content='MLB Team: Rays\nPayroll in millions:
64.17\nWins: 90', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 9}, lookup_index=0),
Document(page_content='MLB Team: Angels\nPayroll in millions:
154.49\nWins: 89', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 10}, lookup_index=0),
Document(page_content='MLB Team: Tigers\nPayroll in millions:
132.30\nWins: 88', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 11}, lookup_index=0),
Document(page_content='MLB Team: Cardinals\nPayroll in millions:
110.30\nWins: 88', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 12}, lookup_index=0),
Document(page_content='MLB Team: Dodgers\nPayroll in millions:
95.14\nWins: 86', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 13}, lookup_index=0),
Document(page_content='MLB Team: White Sox\nPayroll in millions:
96.92\nWins: 85', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 14}, lookup_index=0),
Document(page_content='MLB Team: Brewers\nPayroll in millions:
97.65\nWins: 83', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 15}, lookup_index=0),
Document(page_content='MLB Team: Phillies\nPayroll in millions:
174.54\nWins: 81', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 16}, lookup_index=0),
Document(page_content='MLB Team: Diamondbacks\nPayroll in millions:
74.28\nWins: 81', lookup_str='', metadata={'source':
```

```
'./example_data/mlb_teams_2012.csv', 'row': 17}, lookup_index=0),
Document(page_content='MLB Team: Pirates\nPayroll in millions:
63.43\nWins: 79', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 18}, lookup_index=0),
Document(page_content='MLB Team: Padres\nPayroll in millions:
55.24\nWins: 76', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 19}, lookup_index=0),
Document(page_content='MLB Team: Mariners\nPayroll in millions:
81.97\nWins: 75', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 20}, lookup_index=0),
Document(page_content='MLB Team: Mets\nPayroll in millions:
93.35\nWins: 74', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 21}, lookup_index=0),
Document(page_content='MLB Team: Blue Jays\nPayroll in millions:
75.48\nWins: 73', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 22}, lookup_index=0),
Document(page_content='MLB Team: Royals\nPayroll in millions:
60.91\nWins: 72', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 23}, lookup_index=0),
Document(page_content='MLB Team: Marlins\nPayroll in millions:
118.07\nWins: 69', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 24}, lookup_index=0),
Document(page_content='MLB Team: Red Sox\nPayroll in millions:
173.18\nWins: 69', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 25}, lookup_index=0),
Document(page_content='MLB Team: Indians\nPayroll in millions:
78.43\nWins: 68', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 26}, lookup_index=0),
Document(page_content='MLB Team: Twins\nPayroll in millions:
94.08\nWins: 66', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 27}, lookup_index=0),
Document(page_content='MLB Team: Rockies\nPayroll in millions:
78.06\nWins: 64', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 28}, lookup_index=0),
Document(page_content='MLB Team: Cubs\nPayroll in millions:
88.19\nWins: 61', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 29}, lookup_index=0),
Document(page_content='MLB Team: Astros\nPayroll in millions:
60.65\nWins: 55', lookup_str='', metadata={'source':
'./example_data/mlb_teams_2012.csv', 'row': 30}, lookup_index=0)]
```

Specify a column to identify the document source

Use the `source_column` argument to specify a source for the document created from each row. Otherwise `file_path` will be used as the source for all documents created from the CSV file.

This is useful when using documents loaded from CSV files for chains that answer questions using sources.

```python
loader = CSVLoader(file_path='./example_data/mlb_teams_2012.csv', source_column="Team")

data = loader.load()
```

```python
print(data)
```

```
    [Document(page_content='Team: Nationals\n"Payroll (millions)":
81.34\n"Wins": 98', lookup_str='', metadata={'source': 'Nationals',
'row': 0}, lookup_index=0), Document(page_content='Team: Reds\n"Payroll
(millions)": 82.20\n"Wins": 97', lookup_str='', metadata={'source':
'Reds', 'row': 1}, lookup_index=0), Document(page_content='Team:
Yankees\n"Payroll (millions)": 197.96\n"Wins": 95', lookup_str='',
metadata={'source': 'Yankees', 'row': 2}, lookup_index=0),
Document(page_content='Team: Giants\n"Payroll (millions)":
117.62\n"Wins": 94', lookup_str='', metadata={'source': 'Giants',
'row': 3}, lookup_index=0), Document(page_content='Team:
Braves\n"Payroll (millions)": 83.31\n"Wins": 94', lookup_str='',
metadata={'source': 'Braves', 'row': 4}, lookup_index=0),
Document(page_content='Team: Athletics\n"Payroll (millions)":
55.37\n"Wins": 94', lookup_str='', metadata={'source': 'Athletics',
'row': 5}, lookup_index=0), Document(page_content='Team:
Rangers\n"Payroll (millions)": 120.51\n"Wins": 93', lookup_str='',
metadata={'source': 'Rangers', 'row': 6}, lookup_index=0),
Document(page_content='Team: Orioles\n"Payroll (millions)":
81.43\n"Wins": 93', lookup_str='', metadata={'source': 'Orioles',
'row': 7}, lookup_index=0), Document(page_content='Team: Rays\n"Payroll
(millions)": 64.17\n"Wins": 90', lookup_str='', metadata={'source':
'Rays', 'row': 8}, lookup_index=0), Document(page_content='Team:
Angels\n"Payroll (millions)": 154.49\n"Wins": 89', lookup_str='',
metadata={'source': 'Angels', 'row': 9}, lookup_index=0),
Document(page_content='Team: Tigers\n"Payroll (millions)":
132.30\n"Wins": 88', lookup_str='', metadata={'source': 'Tigers',
'row': 10}, lookup_index=0), Document(page_content='Team:
Cardinals\n"Payroll (millions)": 110.30\n"Wins": 88', lookup_str='',
metadata={'source': 'Cardinals', 'row': 11}, lookup_index=0),
```

```
Document(page_content='Team: Dodgers\n"Payroll (millions)":
95.14\n"Wins": 86', lookup_str='', metadata={'source': 'Dodgers',
'row': 12}, lookup_index=0), Document(page_content='Team: White
Sox\n"Payroll (millions)": 96.92\n"Wins": 85', lookup_str='', metadata=
{'source': 'White Sox', 'row': 13}, lookup_index=0),
Document(page_content='Team: Brewers\n"Payroll (millions)":
97.65\n"Wins": 83', lookup_str='', metadata={'source': 'Brewers',
'row': 14}, lookup_index=0), Document(page_content='Team:
Phillies\n"Payroll (millions)": 174.54\n"Wins": 81', lookup_str='',
metadata={'source': 'Phillies', 'row': 15}, lookup_index=0),
Document(page_content='Team: Diamondbacks\n"Payroll (millions)":
74.28\n"Wins": 81', lookup_str='', metadata={'source': 'Diamondbacks',
'row': 16}, lookup_index=0), Document(page_content='Team:
Pirates\n"Payroll (millions)": 63.43\n"Wins": 79', lookup_str='',
metadata={'source': 'Pirates', 'row': 17}, lookup_index=0),
Document(page_content='Team: Padres\n"Payroll (millions)":
55.24\n"Wins": 76', lookup_str='', metadata={'source': 'Padres', 'row':
18}, lookup_index=0), Document(page_content='Team: Mariners\n"Payroll
(millions)": 81.97\n"Wins": 75', lookup_str='', metadata={'source':
'Mariners', 'row': 19}, lookup_index=0), Document(page_content='Team:
Mets\n"Payroll (millions)": 93.35\n"Wins": 74', lookup_str='',
metadata={'source': 'Mets', 'row': 20}, lookup_index=0),
Document(page_content='Team: Blue Jays\n"Payroll (millions)":
75.48\n"Wins": 73', lookup_str='', metadata={'source': 'Blue Jays',
'row': 21}, lookup_index=0), Document(page_content='Team:
Royals\n"Payroll (millions)": 60.91\n"Wins": 72', lookup_str='',
metadata={'source': 'Royals', 'row': 22}, lookup_index=0),
Document(page_content='Team: Marlins\n"Payroll (millions)":
118.07\n"Wins": 69', lookup_str='', metadata={'source': 'Marlins',
'row': 23}, lookup_index=0), Document(page_content='Team: Red
Sox\n"Payroll (millions)": 173.18\n"Wins": 69', lookup_str='',
metadata={'source': 'Red Sox', 'row': 24}, lookup_index=0),
Document(page_content='Team: Indians\n"Payroll (millions)":
78.43\n"Wins": 68', lookup_str='', metadata={'source': 'Indians',
'row': 25}, lookup_index=0), Document(page_content='Team:
Twins\n"Payroll (millions)": 94.08\n"Wins": 66', lookup_str='',
metadata={'source': 'Twins', 'row': 26}, lookup_index=0),
Document(page_content='Team: Rockies\n"Payroll (millions)":
78.06\n"Wins": 64', lookup_str='', metadata={'source': 'Rockies',
'row': 27}, lookup_index=0), Document(page_content='Team:
Cubs\n"Payroll (millions)": 88.19\n"Wins": 61', lookup_str='',
metadata={'source': 'Cubs', 'row': 28}, lookup_index=0),
Document(page_content='Team: Astros\n"Payroll (millions)":
60.65\n"Wins": 55', lookup_str='', metadata={'source': 'Astros', 'row':
29}, lookup_index=0)]
```