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# 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.

```python
from langchain.document_loaders.csv_loader import CSVLoader
```

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

```python
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),
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{'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':
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Orioles\n"Payroll (millions)": 81.43\n"Wins": 93', lookup_str='', metadata={'source':
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'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.

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

data = loader.load()
```

```
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=
```

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{'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)]
```