linear_regresion

February 24, 2019

In [5]:
```
from sklearn.datasets import load_boston
boston = load_boston()
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(boston.data, boston.target, test_s
```

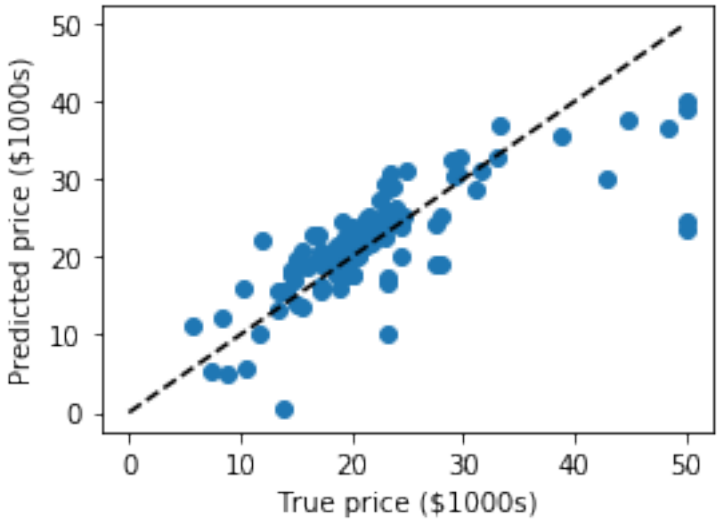
In [8]:
```
from sklearn.linear_model import LinearRegression
regr = LinearRegression()
regr.fit(X_train, y_train)
y_pred = regr.predict(X_test)
from sklearn.metrics import mean_absolute_error
print("MAE: %s" % mean_absolute_error(y_test, y_pred))
```

```
MAE: 3.8429092204444952
```

In [9]:
```
# mesure time
%timeit regr.fit(X_train, y_train)
```

```
444 ţs ś 3.07 ţs per loop (mean ś std. dev. of 7 runs, 1000 loops each)
```

In [12]:
```
# Plot outputs
import matplotlib.pyplot as plt
plt.figure(figsize=(4, 3))
plt.scatter(y_test, y_pred)
plt.plot([0, 50], [0, 50], '--k')
plt.axis('tight')
plt.xlabel('True price ($1000s)')
plt.ylabel('Predicted price ($1000s)')
plt.tight_layout()
```



In [ ]: