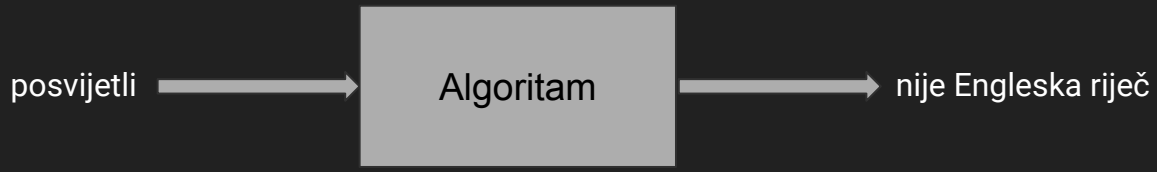
PRIMJER KORIŠTENJA STROJNOG UČENJA U NLP-u

Mario Kučić


posvijetli
Algoritam
nije Engleska riječ


posvijetli nije eng
spektakularniju nije eng
monogamist engl
prijavu nije eng
fotografiravši nije eng


posvijetli
Algoritam
nije Engleska riječ
posvijetli
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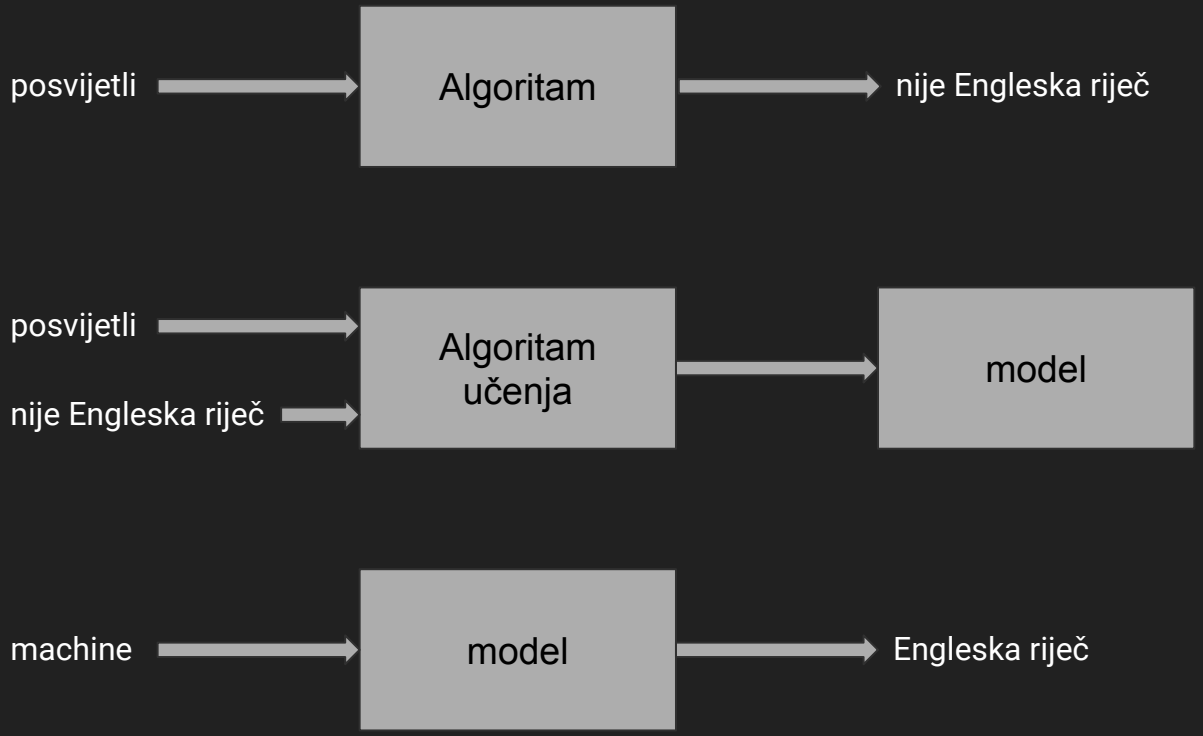
Algoritam učenja
model

posvijetli	nije eng
spektakularniju	nije eng
monogamist	engl
prijavu	nije eng
fotografiravši	nije eng



```
podaci = pd.read_csv('podaci.csv')
```

učitavanje podataka

učitavanje podataka

```
podaci = pd.read_csv('podaci.csv')

podaci.head()
```

	rijec	klasa
0	posvijetli	0
1	spektakularniju	0
2	monogamist	1
3	prijavu	0
4	fotografiravši	0

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učitavanje podataka

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podaci = pd.read_csv('podaci.csv')

rijeci_ucenje, rijeci_test, klase_ucenje, klase_test =\
    train_test_split(podaci['rijec'], podaci['klasa'],
    test_size=0.2)
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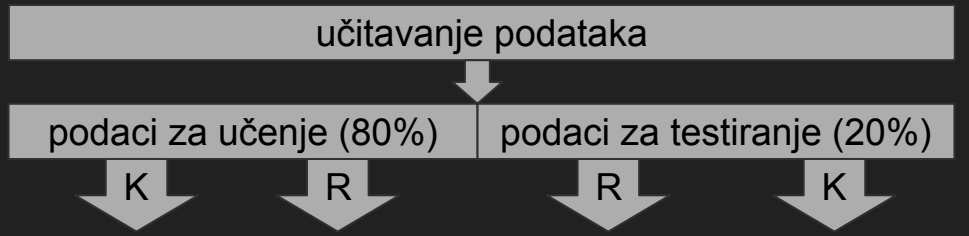

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      ngram_range=(1, 3), analyzer='char')

ngram_ucenje = transformator.fit_transform(
      rijeci_ucenje)

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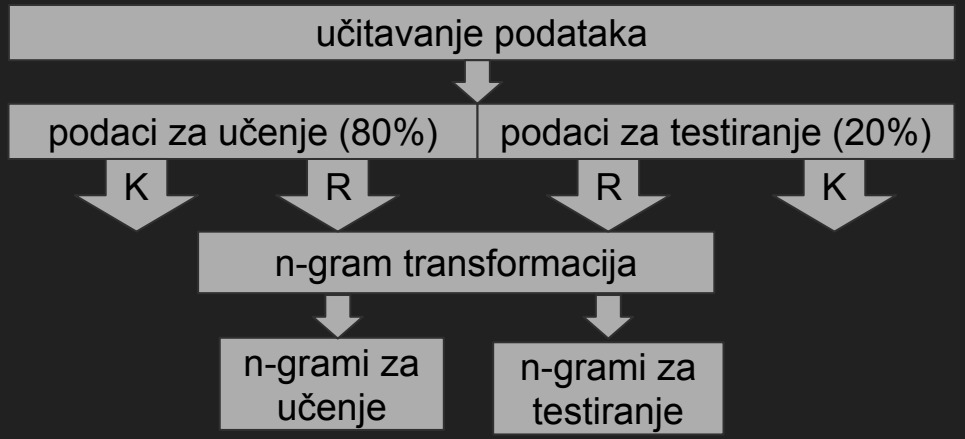

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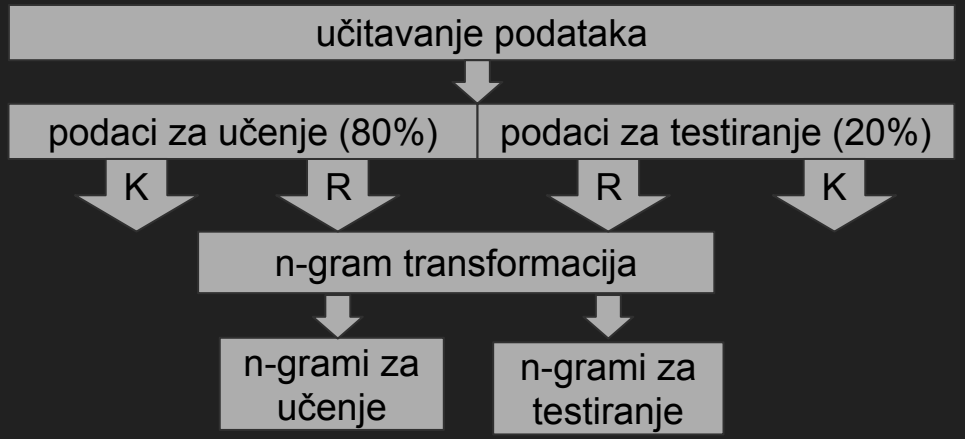

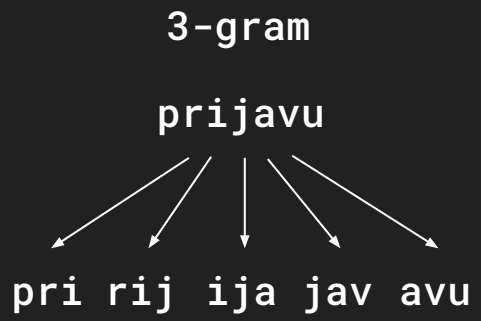

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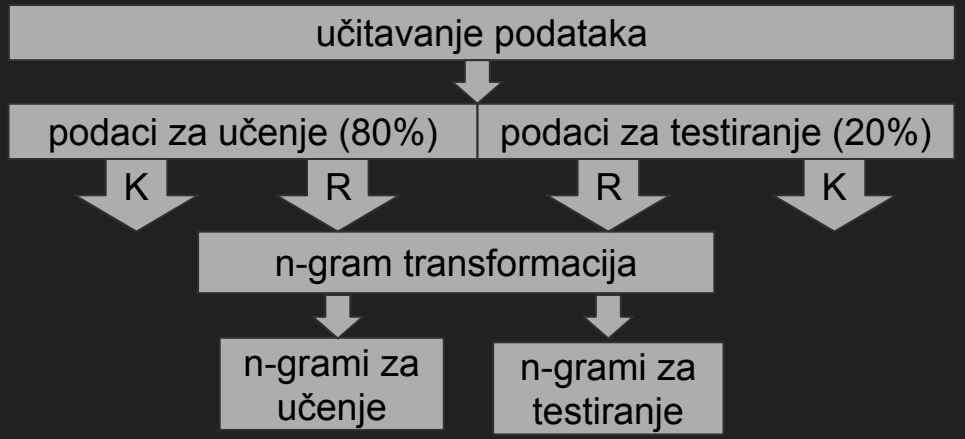

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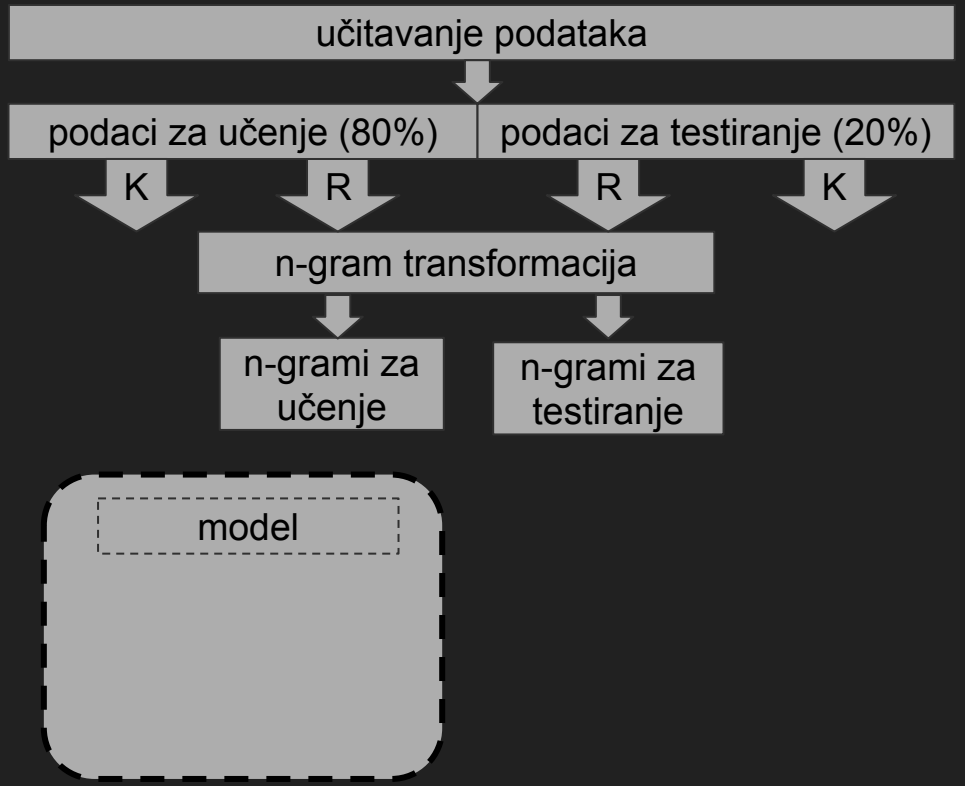

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rezultati = cross_val_score(
      model, ngram_ucenje, klase_ucenje)

print(f'Avg F1 {rezultati.mean():.3f}') # Avg F1 0.870
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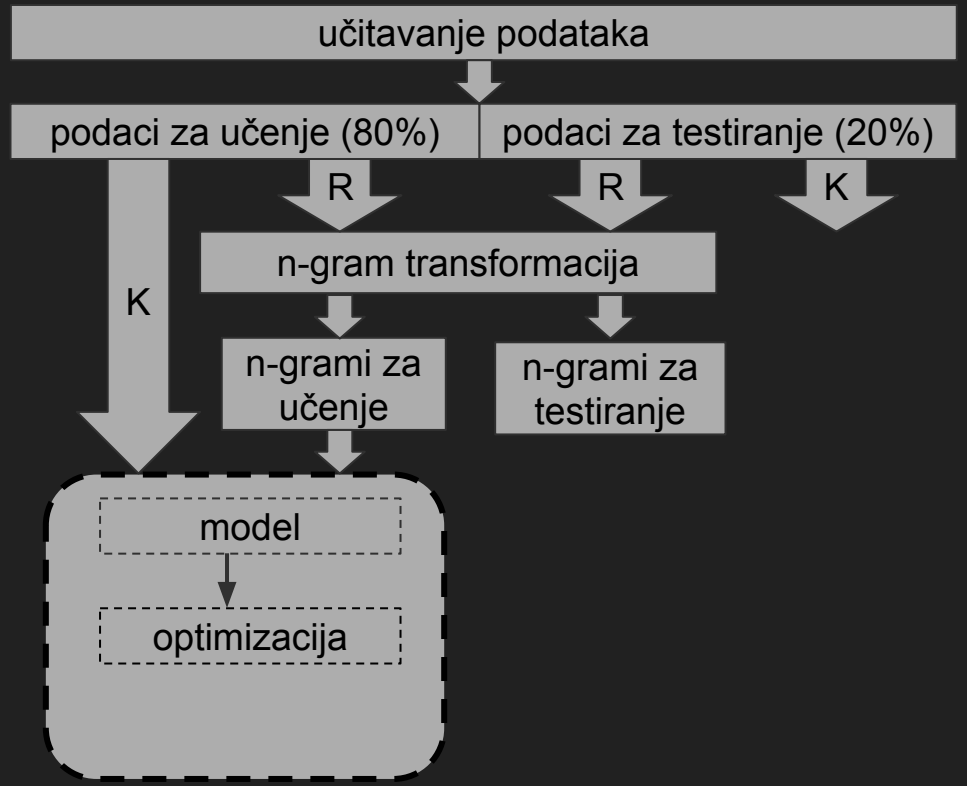

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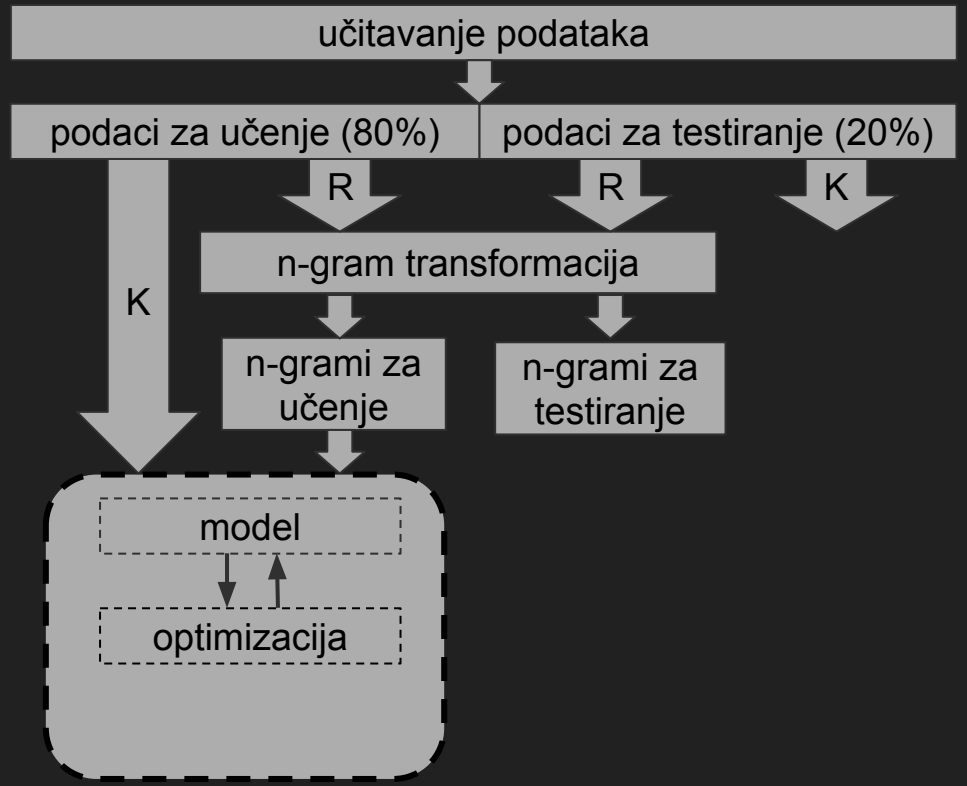

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model.fit(ngram_ucenje, klase_ucenje)
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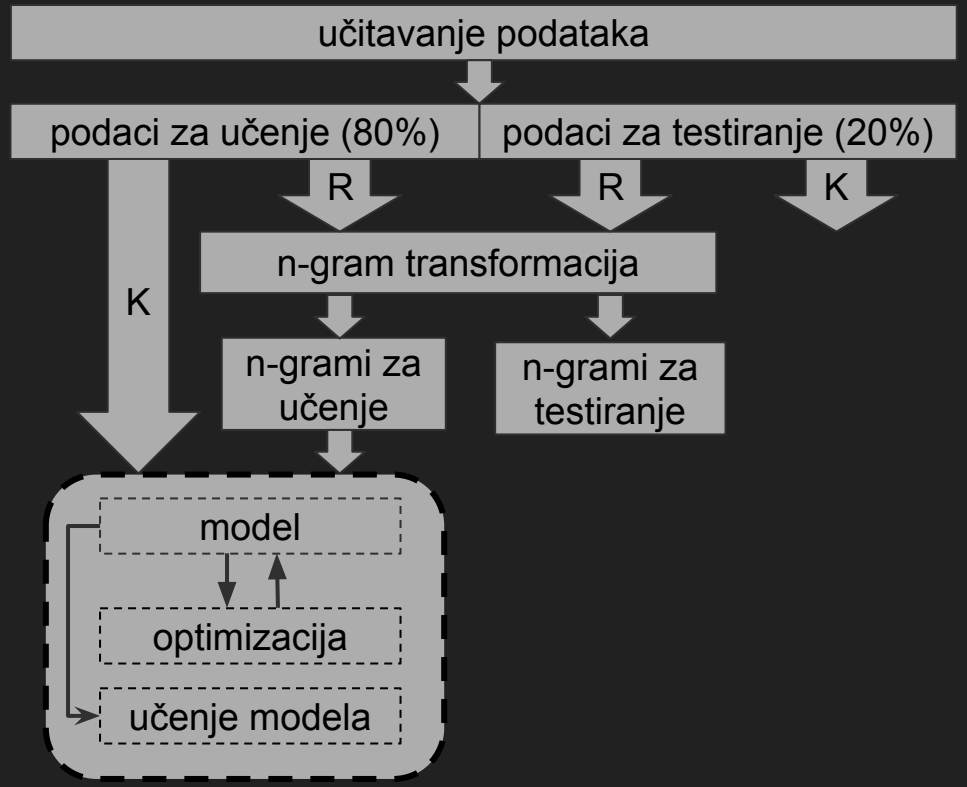

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model.fit(ngram_ucenje, klase_ucenje)

predvidjene_klase = model.predict(ngram_test)
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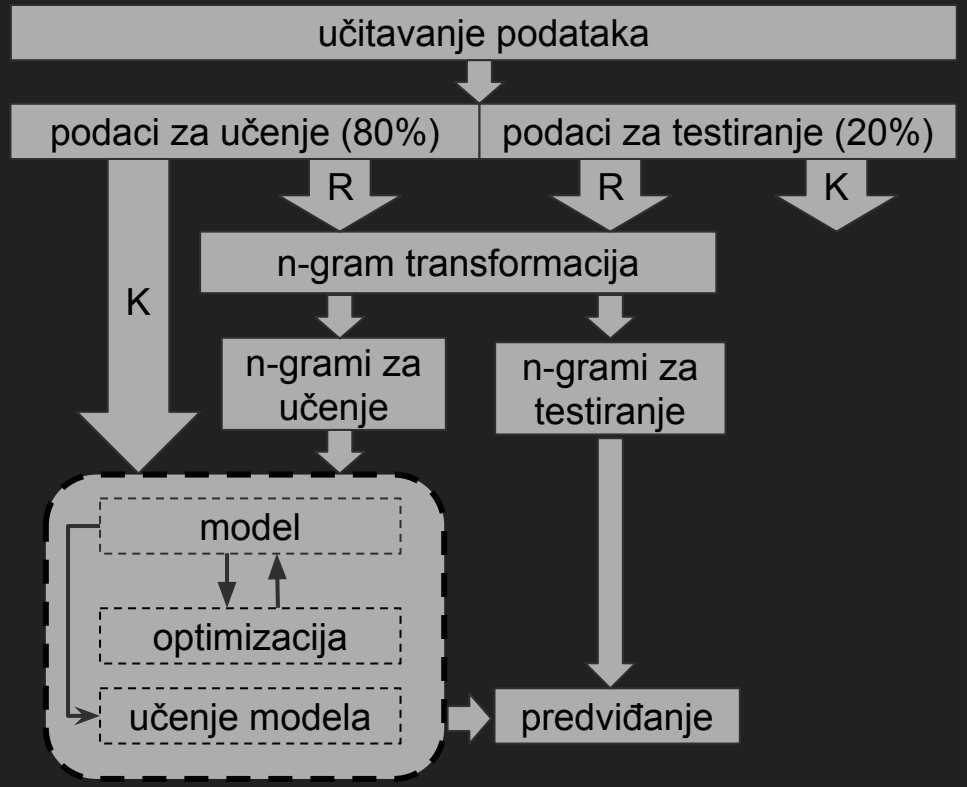

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predvidjene_klase = model.predict(ngram_test)

rezultat = f1_score(klase_test, predvidjene_klase)
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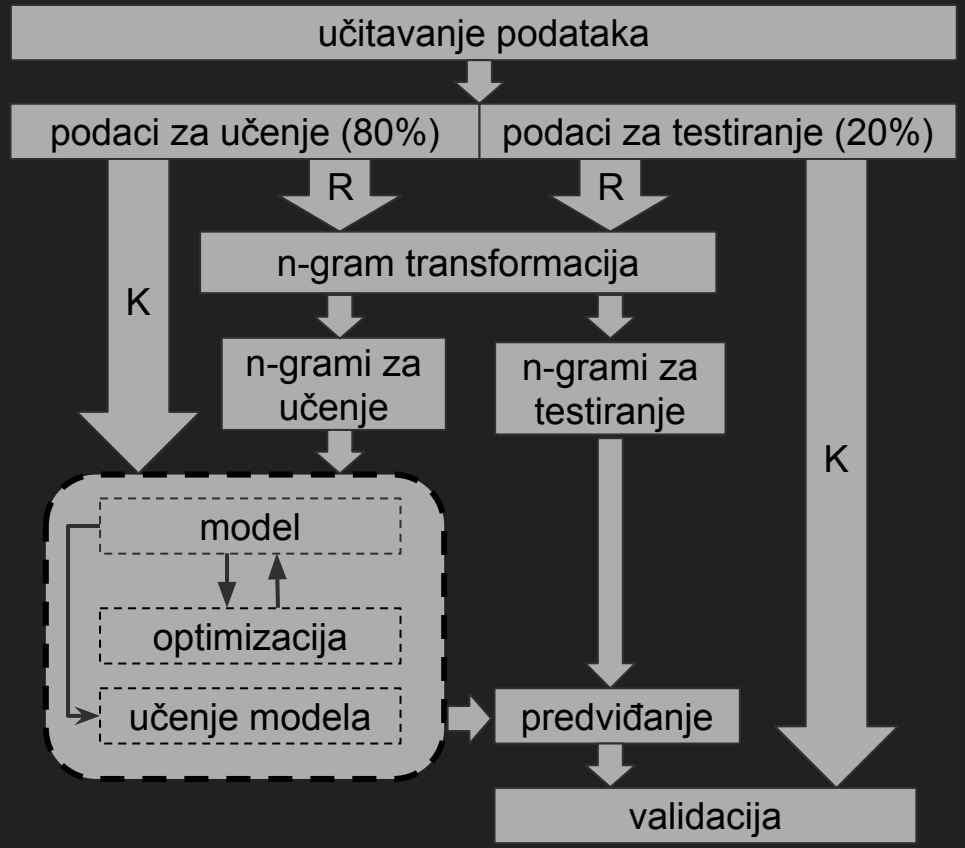

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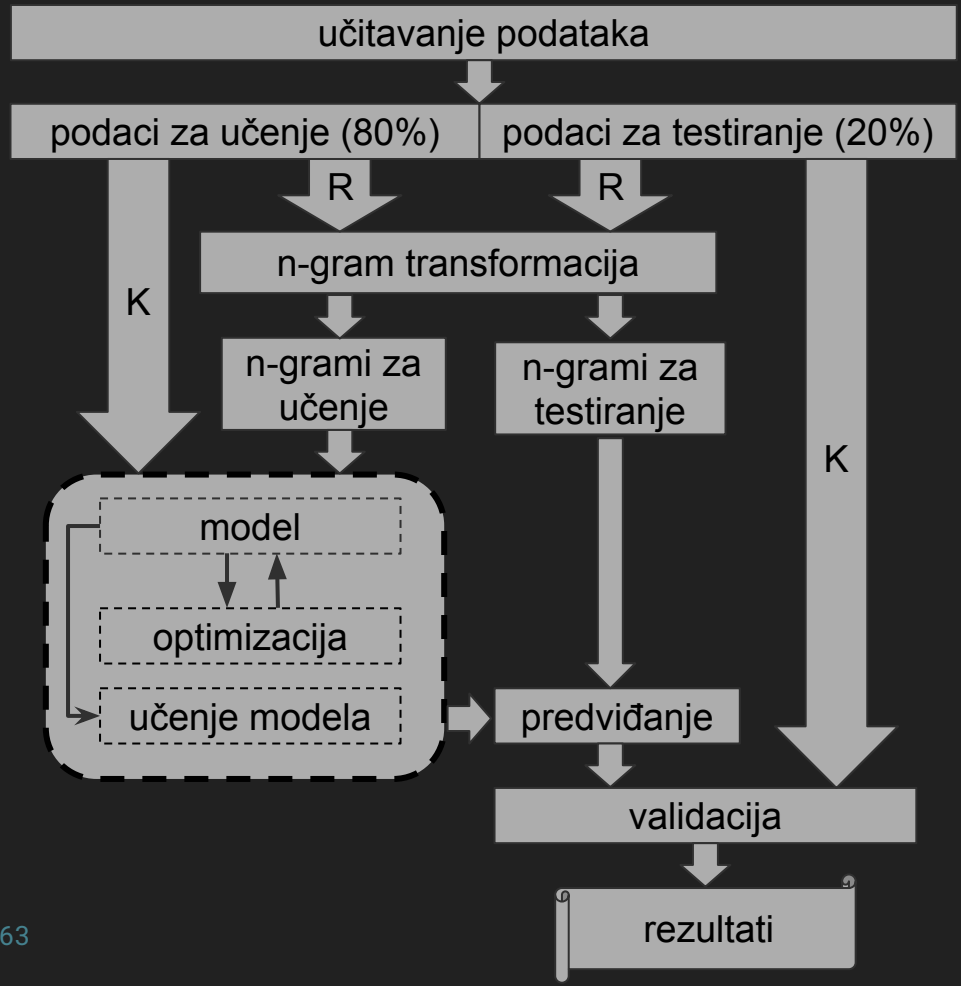
model.fit(ngram_ucenje, klase_ucenje)

predvidjene_klase = model.predict(ngram_test)

rezultat = f1_score(klase_test, predvidjene_klase)

print(f'F1 rezultat: {rezultat:.3f}') # F1 rezultat: 0.863
```



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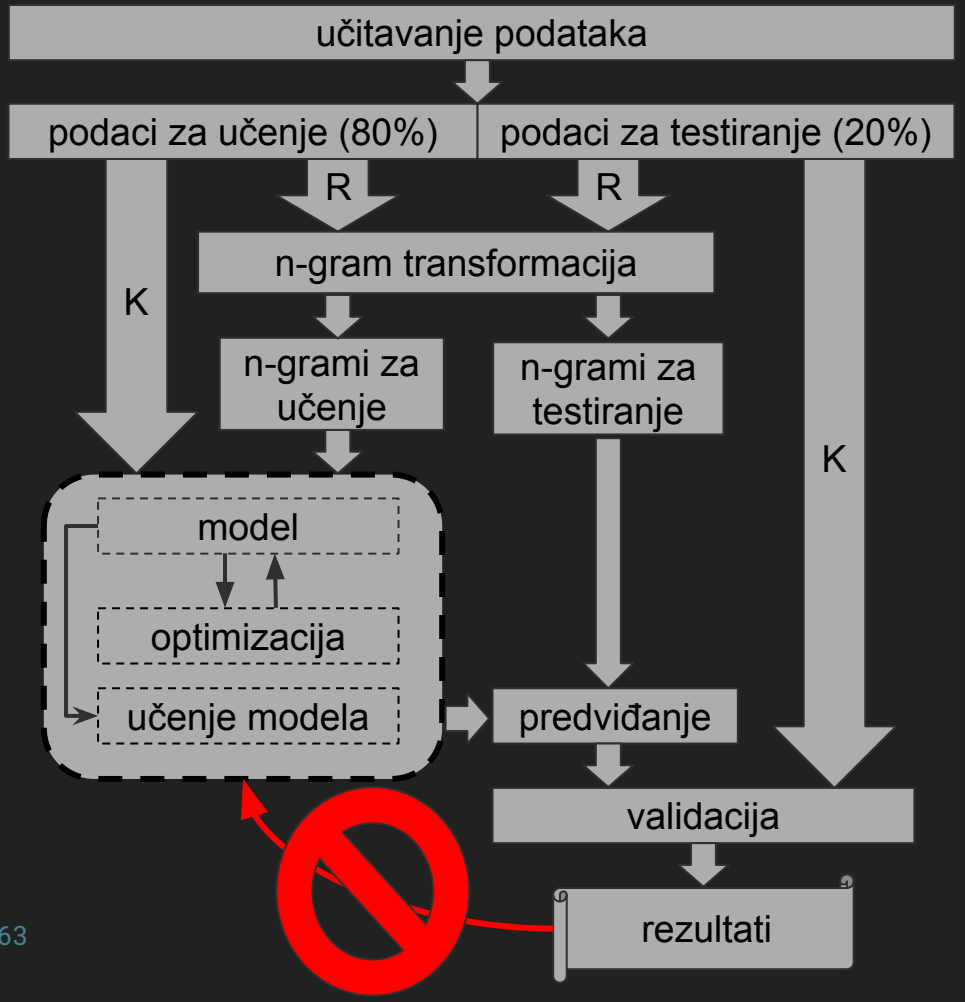

github.com/laconlab/lacon-workshop-2021