

System obliczający wyniki wyborów dla uogólnienia systemu k-Borda

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Projekt realizowany pod opieką
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6 czerwca 2016

Plan

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 - Rejestracja
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Dane użytkownika

Election Computing System

[Log in](#) [Register](#)

Hello world!

Dane użytkownika

Są zabezpieczone dzięki dostarczonym przez django mechanizmom zarządzania kontem i poufnymi danymi użytkownika.

Rejestracja
Tworzenie wyborów
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Podsumowanie

Pobieranie danych z pliku
Generowanie z rozkładu normalnego

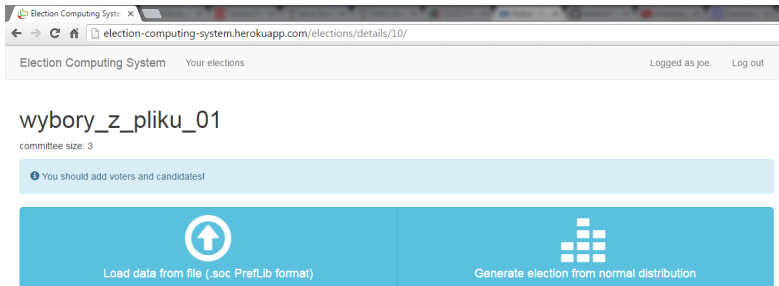
Panel dodawania wyborów

The screenshot shows a web browser window with the title "Election Computing System". The address bar shows the URL "election-computing-system.herokuapp.com/elections/list/". The page has a navigation bar with "Election Computing System" and "Your elections" tabs, and a user status "Logged as joe. Log out". The main heading is "Your elections". Below it is a table with columns: Name, Candidates, Voters, Results, and Actions. A green button labeled "+ New election" is located in the Actions column.

Name	Candidates	Voters	Results	Actions
+ New election				

Dodawanie wyborów

- Z pliku
- Z rozkładu normalnego
- ?



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Pobieranie danych z pliku

The screenshot shows a web browser window with the address bar displaying 'election-computing-system.herokuapp.com/elections/new/'. The page title is 'Election Computing System' and the user is logged in as 'joe'. The main heading is 'Create new election'. There are two input fields: 'Name:' with the value 'wybory_z_pliku_01' and 'Committee size:' with the value '3'. A blue 'Create election' button is at the bottom.

Election Computing System Your elections Logged as joe Log out

Create new election

Name:

Committee size:

[Create election](#)

Dane gotowe do obliczania wyborów

The screenshot shows the 'Election Computing System' interface. The main heading is 'wybory_z_pliku_02'. A green box indicates 'Successfully added election data from file!' with details: 4 candidates, 1814 voters, and 24 unique votes. Below this, the committee size is 2. The 'Available results' section has a 'Collapse/expand results listing' button and an 'Add new result' link. The 'Voters listing' section also has a 'Collapse/expand voters listing' button. A blue box highlights a list of candidates and their vote counts, with a file icon and 'ED-00004-00000196.soc' in the top right corner of the box.

Candidate	Votes
1, Dirty Dancing	1814, 1814, 24
2, Maid in Manhattan	491, 3, 4, 1, 2
3, Shrek (Full-screen)	397, 3, 1, 4, 2
4, Father of the Bride	222, 3, 4, 2, 1
	138, 1, 3, 4, 2
	101, 3, 1, 2, 4
	87, 3, 2, 4, 1
	64, 4, 3, 1, 2
	58, 1, 3, 2, 4
	47, 3, 2, 1, 4
	45, 4, 3, 2, 1
	37, 1, 4, 3, 2
	32, 4, 1, 3, 2
	26, 1, 4, 2, 3
	13, 1, 2, 4, 3
	12, 4, 1, 2, 3
	11, 4, 2, 1, 3
	8, 2, 3, 4, 1
	7, 1, 2, 3, 4
	6, 2, 3, 1, 4
	4, 4, 2, 3, 1
	4, 2, 1, 3, 4
	2, 2, 1, 4, 3
	1, 2, 4, 3, 1
	1, 2, 4, 1, 3

Ustalanie parametrów populacji

The screenshot shows a web browser window with the URL `election-computing-system.herokuapp.com/elections/generate_data/14/`. The page title is "Election Computing System" and the user is logged in as "Joe". The main heading is "Generate data from normal distribution". Below this, there are input fields for various parameters, each with a label and a text box containing a value. At the bottom, there is a blue button labeled "Generate data for election".

Parameter	Value
Candidates amount:	24
Voters amount:	9
Candidates mean x:	0
Candidates mean y:	0
Candidates sigma:	30
Voters mean x:	0
Voters mean y:	0
Voters sigma:	30

Generate data for election

Ustalanie parametrów populacji...

Election Computing System Your elections

Generate data from normal distribution

Candidates amount:

Voters amount:

Candidates mean x: Wartość nie może być większa niż 50.

Candidates mean y:

Candidates sigma:

Voters mean x:

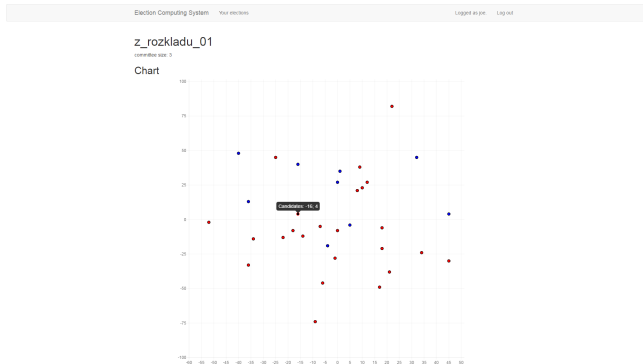
Voters mean y:

Voters sigma:

[Generate data for election](#)

- ograniczenia na ilość wierszy w bazie danych
- brak możliwości określenia timeoutu...

Wykres



- dodatkowe informacje o punkcie
- inne sposoby generowania wykresów...

Lista preferencji

Available results

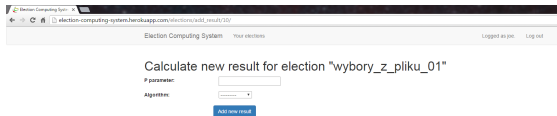
Collapse/expand results listing
1 - Brute force - 3.892759s
20 - Brute force - 8.626438s
Add new result

Voters listing

Collapse/expand voters listing
tx 1 - Eva [15], 2 - Gloria [17], 3 - Lynn [8], 4 - Wilbert [22], 5 - Joshua [2], 6 - Shelby [19], 7 - Virginia [1], 8 - Todd [14], 9 - Dennis [3], 10 - Samuel [11], 11 - Tracy [13], 12 - Mark [4], 13 - Victoria [21], 14 - Tony [5], 15 - Daniel [24], 16 - Gregory [16], 17 - Ruby [6], 18 - Edith [13], 19 - Nancy [12], 20 - Jane [23], 21 - Michelle [8], 22 - Pamela [7], 23 - Linda [20], 24 - Paul [10]
tx 1 - Linda [20], 2 - Pamela [7], 3 - Dennis [3], 4 - John [23], 5 - Gregory [16], 6 - Ruby [6], 7 - Edith [13], 8 - Joshua [2], 9 - Tracy [13], 10 - Wilbert [22], 11 - Shelby [19], 12 - Lynn [8], 13 - Gloria [17], 14 - Paul [10], 15 - Todd [14], 16 - Victoria [21], 17 - Eva [15], 18 - Virginia [1], 19 - Samuel [11], 20 - Daniel [24], 21 - Mark [4], 22 - Tony [5], 23 - Nancy [12], 24 - Michelle [8]
tx 1 - Gregory [16], 2 - Ruby [6], 3 - Edith [13], 4 - Pamela [7], 5 - Dennis [3], 6 - Linda [20], 7 - Wilbert [22], 8 - Gloria [17], 9 - Todd [14], 10 - Joshua [2], 11 - Lynn [8], 12 - Shelby [19], 13 - Virginia [1], 14 - Tracy [13], 15 - Eva [15], 16 - Paul [10], 17 - John [23], 18 - Daniel [24], 19 - Mark [4], 20 - Victoria [21], 21 - Nancy [12], 22 - Samuel [11], 23 - Tony [5], 24 - Michelle [8]
tx 1 - Todd [14], 2 - Daniel [24], 3 - Nancy [12], 4 - Virginia [1], 5 - Ruby [6], 6 - Edith [13], 7 - Gregory [16], 8 - Gloria [17], 9 - Mark [4], 10 - Pamela [7], 11 - Wilbert [22], 12 - Eva [15], 13 - Tony [5], 14 - Dennis [3], 15 - Lynn [8], 16 - Joshua [2], 17 - Shelby [19], 18 - Samuel [11], 19 - Tracy [13], 20 - Linda [20], 21 - Paul [10], 22 - Victoria [21], 23 - Michelle [8], 24 - John [23]
tx 1 - Pamela [7], 2 - Edith [13], 3 - Ruby [6], 4 - Gregory [16], 5 - Linda [20], 6 - Dennis [3], 7 - Wilbert [22], 8 - Gloria [17], 9 - Todd [14], 10 - Joshua [2], 11 - Lynn [8], 12 - Paul [10], 13 - Shelby [19], 14 - Virginia [1], 15 - Tracy [13], 16 - Eva [15], 17 - John [23], 18 - Daniel [24], 19 - Mark [4], 20 - Victoria [21], 21 - Nancy [12], 22 - Samuel [11], 23 - Tony [5], 24 - Michelle [8]
tx 1 - Dennis [3], 2 - John [23], 3 - Tracy [13], 4 - Joshua [2], 5 - Shelby [19], 6 - Lynn [8], 7 - Linda [20], 8 - Wilbert [22], 9 - Gloria [17], 10 - Gregory [16], 11 - Victoria [21], 12 - Ruby [6], 13 - Edith [13], 14 - Pamela [7], 15 - Eva [15], 16 - Todd [14], 17 - Virginia [1], 18 - Samuel [11], 19 - Mark [4], 20 - Daniel [24], 21 - Tony [5], 22 - Paul [10], 23 - Michelle [8], 24 - Nancy [12]
tx 1 - Linda [20], 2 - Pamela [7], 3 - Gregory [16], 4 - Edith [13], 5 - Ruby [6], 6 - Dennis [3], 7 - Wilbert [22], 8 - Joshua [2], 9 - Gloria [17], 10 - Lynn [8], 11 - Shelby [19], 12 - John [23], 13 - Paul [10], 14 - Tracy [13], 15 - Todd [14], 16 - Eva [15], 17 - Virginia [1], 18 - Victoria [21], 19 - Daniel [24], 20 - Mark [4], 21 - Samuel [11], 22 - Nancy [12], 23 - Tony [5], 24 - Michelle [8]

• powiązanie danych z punktami

Konfiguracja obliczeń



- możliwość wyboru algorytmu...
- możliwość wyboru parametru

Rezultaty

The screenshot shows a web browser window with the URL `election-computing-system.herokuapp.com/elections/details/12/`. The page title is "Election Computing System" and the subtitle is "Your elections". The main heading is "wybory_z_pliku_02" with a subtext "committee size: 2". Under the heading "Available results", there is a button "Collapse/expand results listing". Below this, a table lists results:

1 - Brute force - 0.04713s
1 - Genetic - 0.026474s
20 - Brute force - 0.060342s
20 - Genetic - 0.039266s

At the bottom of the results section is a button "Add new result". Below the results section is the heading "Voters listing" with a button "Collapse/expand voters listing".

- wybrany parametr p
- zastosowany algorytm
- czas wykonania obliczeń
- wyniki wyborów pod linkiem

Komitet

The image displays two side-by-side browser screenshots of the 'Election Computing System' interface. Both screenshots show the results for an election named 'wybory_z_pliku_02' with $p=1$. The left screenshot is for election ID 18, and the right is for election ID 20. Both show a table of winners with columns for name and votes.

Left Screenshot (Election ID 18):

Result of wybory_z_pliku_02 with $p=1$
Winners

Collapse/expand winners listing	
Shrek (Full-screen)	1
Father of the Bride	1
Blah blah blah	1

Right Screenshot (Election ID 20):

Result of wybory_z_pliku_02 with $p=1$
Winners

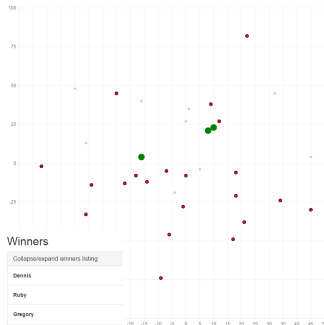
Collapse/expand winners listing	
Shrek (Full-screen)	1
Father of the Bride	1
Blah blah blah	1

Rezultaty

Wykres z zaznaczonymi zwycięzcami wyborów

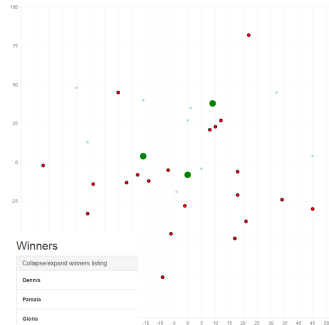
Result of z_rozkładu_01 with p=1

Chart

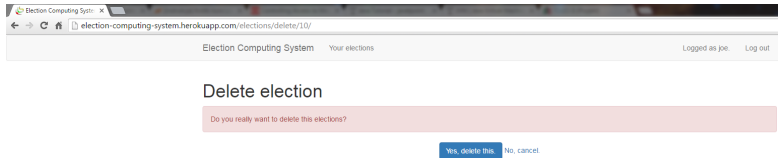


Result of z_rozkładu_01 with p=20

Chart



Usuwanie całych wyborów



- możliwość usuwania pojedynczych rezultatów w ramach wyborów

Podsumowanie

- implementacja wydajniejszych algorytmów
- ulepszenie sposobu wyświetlania wyników
- dodanie obliczania wyników wyborów w tle
- możliwość malowania wykresów przez użytkownika
- dynamiczna zmiana parametru p

Dziękujemy za uwagę