"Wij kiezen partij voor u"
Online Voting Advice

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Abstract

Voters often hesitate which political party to vote for. "Wij kiezen partij voor u" is an easy-to-use online expert system that can help voters make their decisions. The expert system has been made in co-operation with political scientists.

1 Introduction

"Wij kiezen partij voor u" is an online expert system. Its purpose is to help the user making the decision which party to vote for at the elections. It is designed to abstract the user's conception of the world and the political parties that have the most affiliation with that conception.

The system will pose the user about 40 theses on which he/she can give his/hers opinion in a 4 point scale, from complete agreement to complete disagreement. An example of such a thesis is "Environmental issues are often exaggerated." After receiving the answers to all the theses the system will display a histogram with a bar for each party. The longer the bar, the better the party suits the user.

"Wij kiezen partij voor u" does not claim to give the ultimate solution, because of its inherently limited size. It rather guides the user from general ideas into concrete reflection of affiliated parties. Therefore the user is suggested to acquire more information about the recommended parties.

2 The user groups

The system is intended to be used by everybody who is entitled to vote. It will be especially helpful for those voters who have no idea at all which party to vote for. However, the system explicitly leaves the final decision to the user.

3 The organizations for which it is developed

Currently there are two versions of "Wij kiezen partij voor u". The first, Dutch version was developed during the course Knowledge Acquisition at the University

of Groningen which the author attended in spring 1998. It was built for the parliamentary elections of May the 6th, 1998. The web interface was made by Interactivity Internet Publishing v.o.f. [1]

The second, Flemish version was developed after a request from Planet Internet n.v. (a Flemish internet service provider and publisher) for the elections on several levels held in Belgium on June the 13th, 1999.[2]

4   The development of the system

The Dutch version was developed by Wouter Teepe and Geert Kloosterman, both students of Cognitive Science and Engineering at the University of Groningen. Knowledge about Dutch politics was acquired from Bastiaan Slager, a history student at the University of Groningen.

The Flemish version was developed by Wouter Teepe, and knowledge about Flemish politics was acquired from Jo Buelens, political scientist at the Vrije Universiteit Brussel and Stefaan Walgrave, political scientist at the University of Antwerp.

5   The technology used

For each party and each thesis, a histogram of answers to that thesis of a fictive representative group of party members is estimated, creating $\#parties \times \#theses$ 4-tuples. At runtime, all parties initially get the same activation and these activations diverge as a result of knowledge encoded in those histograms.

Parties gain activation for every member in the modeled group making the same decision as the user. The average choice of the members and its deviation is also calculated. Parties lose activation for the difference between the average and the choice of the user, divided by the deviation in the modeled group[3]. This, for example, is to account for a very positive attitude of a party with which the user does not agree.

The activations (affiliations) are then scaled and sorted.

6   The system requirements and the duration

The demonstration requires one, preferably two, personal computers with a live internet connection and a web browser, preferably Netscape.

The two versions of the expert system will be consulted live during the demonstration at `http://www.interactivity.nl/stemadvies/` (Dutch version) and `http://www.planetinternet.be/verkiezingen99/stemadvies/` (Flemish version).

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[1]The Dutch version issues the following political parties: AOV/Unie 55+, CD, CDA, D66, GroenLinks, PvdA, RPF/GPV, SGP, SP and VVD.

[2]The Flemish version issues the following political parties: Agalev, CVP, PvdA, SP, Vlaams Blok, VLD and VU&ID.

[3]A small constant is added to the denominator to prevent division by zero.