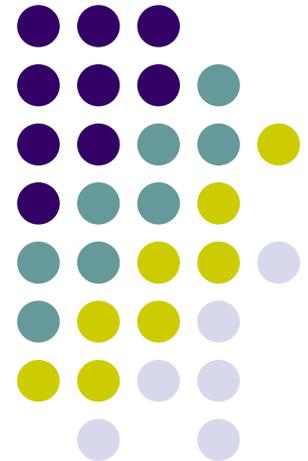


Polimetrics

Lab 1A
Introducing «CyberSenate»



CyberSenate™ consists of two panes, separated by a splitter bar. The left pane (input view) is used to configure basic elements of a spatial voting game. The right pane (chart view) is used to view spatial voting game. The splitter bar can be slide either left or right, typically to modify the screen area available for the chart view.



Menu Bar

Tool Bars

Input View

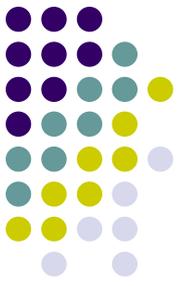
Splitter Bar

Chart View

The screenshot displays the CyberSenate application window titled "A_Group_01.txt - CyberSenate". The interface is divided into several sections:

- Menu Bar:** Located at the top, containing "File", "Edit", "View", "Analysis", and "Help".
- Tool Bars:** Two rows of icons for various functions like "Text", "Database", "Save", "Print", "Monitor", "Prop Line", "Prof Rgn", "Scale", "Oval", "Yield", "Member", "UCS", "Pencil", "Clipboard", "Thru", "Histogram", "Stats", "Color CD", "Menu", "Power", "Grid", and "About".
- Input View (Left Pane):** Contains configuration options for:
 - Scenario:** "Whiteboard"
 - Committee:** "Group" (with "Select Committee" and "Show Members" options)
 - Ratings:** "Dimension 1" (Horizontal) and "Dimension 2" (Vertical)
 - Status Quo:** H: 50, V: 50
 - Proposal:** H: 34.250, V: 58
 - Zoom:** 1 (with +/- controls and "set to default" button)
 - Decision Rule:** 0.500 Fraction, 1 Quota, 1 Total (with "Absolute" and "Relative" radio buttons)
 - Refresh** button
 - Legend:** A list of keyboard shortcuts for actions like "Adjust Legend", "View Coalition", "Create Member", etc.
- Chart View (Right Pane):** A 2D plot titled "Group / Group / Whiteboard" with axes "Dimension 1" and "Dimension 2". It shows:
 - A black dot representing a "member" at approximately (35, -10).
 - A blue plus sign representing a "proposal" at (34.250, 58).
 - A green 'x' representing the "status quo" at (50, 50).
- Members Preferring the Proposal:** A text box on the right showing "3/3" and "Count: 1".
- Legend:** A box at the bottom left of the chart area defining symbols: member (black dot), abstainer (black triangle), status quo (50, 50) (green 'x'), proposal (34.250, 58) (blue plus), and Torky (red dot).

CyberSenate

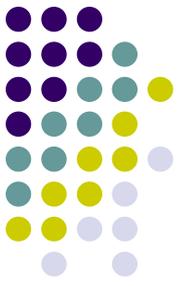


Above the two panes and splitter bar is a menu bar and two tool bars

The menu bar consists of five subgroups that together organize the basic functions you may want to perform

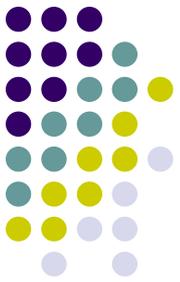
1. File Create, open, and save data files
2. Edit Configure modeling and display parameters
3. View Display or hide spatial voting model features
4. Analysis Select parameters that instantiate a particular spatial voting model
5. Help Online help and customer support information

CyberSenate

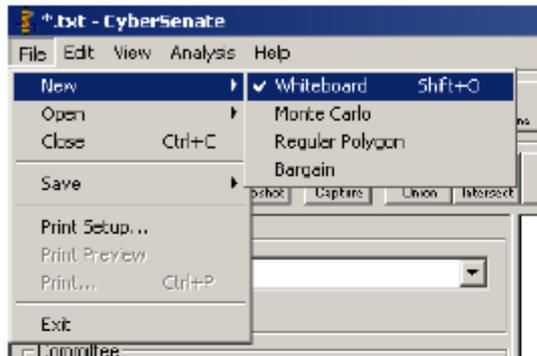


The upper tool bar provides buttons for easy access to key options available from the menu bar

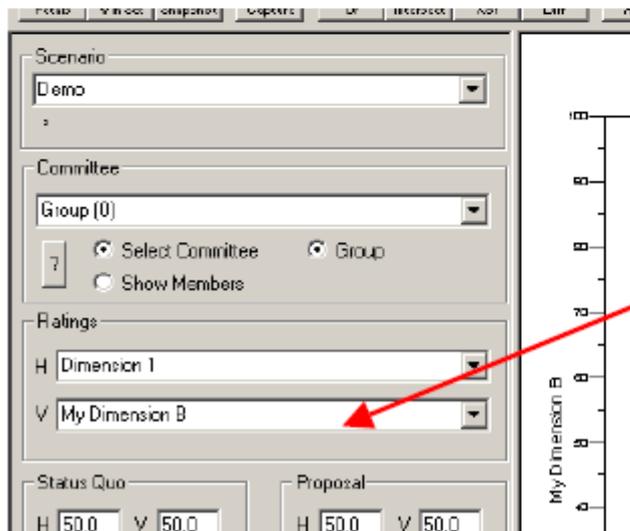
The second lower tool bar provides buttons for interacting with win sets, allowing you to view and manipulate win sets, e.g., find the union of two win sets, determine whether one win set is entirely contained within another win set, etc.



Whiteboard: Create a whiteboard game (no data): File >> New >> Whiteboard



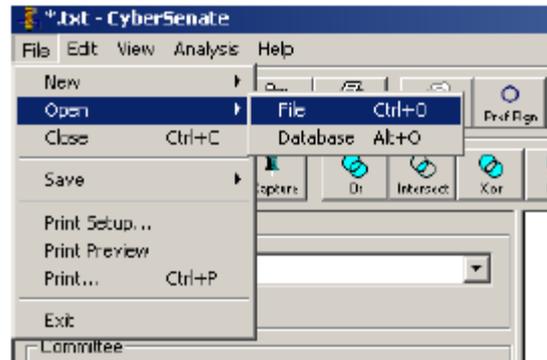
CyberSenate™ is initialized with a single group, Group, and two ratings, Dimension 1 and Dimension 2. The names of the ratings can be changed by directly editing text in the combo boxes. As illustrated below, the vertical rating has been renamed “My Dimension B.”



Edit by typing in the combo box

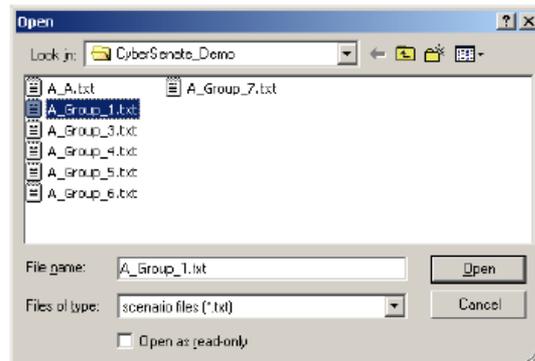
From the Menu Bar...

File: To open an existing game stored in flat file: File >> Open >> File



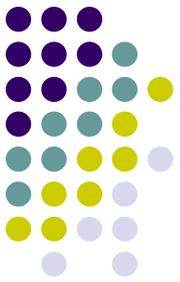
After selecting File, the Open file dialog box appears. Flat files are stored as ASCII text.

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The easiest way to generate these files is to run a demo and save the demo to a file. The following is a file, A_A.txt, created in just this way. You could add members by cutting and pasting member lines.

```
A_A.txt - Notepad
File Edit Format Help
GAME PARAMETERS BEGIN
Scenario      Demo
Group Group   C1
Dimension 1   D1
Dimension 2   D2
Decision Rule 0.500000
Statue Quo    50.000000    50.000000
Proposal      50.000000    50.000000
typePrefRgn   tradeoff
Member XX0    XX0    25.428571    68.857143    1.000000
Member XX1    XX1    17.142857    49.428571    1.000000
Member XX2    XX2    32.571429    22.000000    1.000000
Member XX3    XX3    78.285714    30.571429    1.000000
Member XX4    XX4    73.714286    65.142857    1.000000
Member XX5    XX5    55.428571    77.714286    1.000000
GAME PARAMETERS END
```



To Create a Member...

- 1) Locate the mouse cursor within the chart area at a point where you want the member to appear.
- 2) Hold down the SHIFT key and the click the LEFT mouse button.
- 3) A member will appear at the point selected, with a unique id provided by default.

To Move a Member...

- 1) Place the mouse cursor over the member you want to move.
- 2) Press the LEFT mouse button and continue to hold it down.
- 3) Move the cursor to where you want the member to go.
- 4) Release the LEFT mouse button.

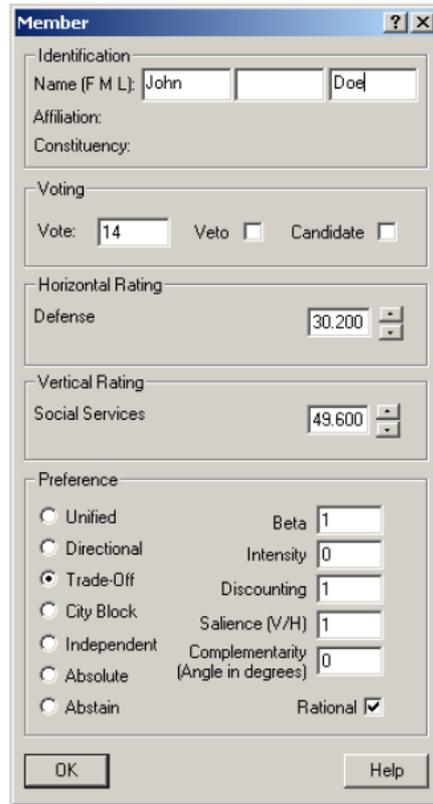
To Delete a Member...

- 1) Locate the mouse cursor within the chart area at a point occupied by the member you want to delete.
- 2) If more than one member is at the same spot, move the member you want to delete aside.
- 3) Hold down the SHIFT key and the click the RIGHT mouse button over the member you want to delete.
- 5) The member will disappear.

To Modify a Member...

- 1) Locate the mouse cursor within the chart area at a point occupied by the member whose attributes you want to modify.
- 2) Double click the LEFT mouse button.
- 3) The member dialog appears

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The screenshot shows a 'Member' dialog box with the following sections:

- Identification:** Name (F M L): John [] Doe
- Affiliation:** Constituency:
- Voting:** Vote: 14 Veto Candidate
- Horizontal Rating:** Defense: 30.200
- Vertical Rating:** Social Services: 49.600
- Preference:**
 - Unified Beta: 1
 - Directional Intensity: 0
 - Trade-Off Discounting: 1
 - City Block Saliency (V/H): 1
 - Independent Complementarity (Angle in degrees): 0
 - Absolute
 - Abstain Rational

Buttons: OK, Help

Those controls that have a white background can be edited. Note the different preference models that are available. Some preference models such as trade-off and city-block support additional saliency and complementarity attributes.

If the veto check box is selected, only those points closer to the member's ideal point than the status quo, according to which ever metric (preference model) has been selected will be allowed in the win set.

If the rational check box is not selected, a model of bounded rationality will be used. See: Menu Bar Edit>>Rationality to bring up the (bounded) rationality model editor displayed below:

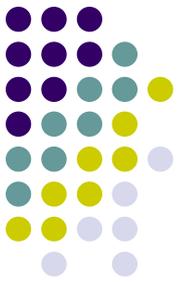


Let's make some examples



- 1) create a point / click on the point and name it "Party A" / select trade-off as preference (i.e., Euclidean preferences), equal saliency and vote=1 / click on "show names" / draw the indifference circle / move around the point A / move around the status quo as well
- 2) add another point and name it "Party B" / select city block as preference and vote=1
- 3) add another point and name it "Party C" / select trade-off as preference, dimension 1 twice as salient compared to dimension 2 (two units along dimension 2 = one unit along dimension 1, i.e., dimension 1 is twice as important compared to dimension 2) and vote=1
- 4) add another point and name it "Party D" / select trade-off as preference, dimension 2 twice as salient compared to dimension 1 (0.5) and vote=1
- 5) save to file: "example 1"

Let's make some examples



6) open file “example 1” (from the .txt file)

7) let's change the name of the two dimensions directly from the .txt and let's call the horizontal axis: “dim A” and the vertical axis: “dim B”. Then change the preferences of parties B and D so that they both have the same Euclidean preferences with equal salience. Let's save the file with a different name: “example 1bis”

Let's make some examples



8) a) open the previous “example 1” file; b) change both the name and the range of the horizontal and vertical dimension. Call the former “economic policy” and the latter “foreign policy”. Range of both dimensions: 0-10; c) delete all the previous parties; d) add the following three parties at the following position: Party A (3; 4.5); Party B (2; 8.2); Party C (7.2; 1.4); e) add the status-quo to the position (4; 5.2); f) all parties present Euclidean preferences with same weight for both dimension