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Information Visualization

Program Proposal

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Phase 2: April 1, 2008

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Phase 1

Description of Dataset

This dataset regards trends in quality-of-life found in nations around the world. It has been collected for 20 years and contains data on measured happiness in 14 nations with over 10 comparable datapoints. These datapoints include information such as *average happiness, inequality of happiness,* and *life expectancy.* This data has been used in many different contexts attempts to identify trends of happiness in nations and explain the changes of happiness over time [1].

Interactive Functionality

Our application will provide animated visualization over time as well as filtering options. We would like our users to be able to identify interesting trends over time while also finding the interface enjoyable.

Expected Results

We predict that happiness will show drops during years of catastrophic and traumatic events. We also believe the general trend will show an increase in happiness over time throughout most nations. However, we believe that within the last decade, there will be a downward trend in the United States due to a lack of work-life balance.

1 Veenhoven, R., World Database of Happiness, Erasmus University Rotterdam. Available at: http://worlddatabaseofhappiness.eur.nl Assessed at: 2/19/08

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Phase 2

Interface Enhancement

Datapoint selection

To inspect a datapoint in detail, the user will need the object representing that nation to be emphasized. To accomplish this, we suggest deemphasizing the remaining datapoints which are not being studied by use of color and opacity.

Data tracing

Currently it is difficult to visualize GDP, life expectancy, and happiness over time. We believe that a tracing feature will produce a visualization that is conducive to understanding and interpreting values changing over time.

Timeline manipulation

In the current version of the system, as the user plays the visualization, the respective year is displayed at the top. We propose that the user should have the ability to manipulate the year displayed. This functionality would enable the user to examine relationships and progressions of data over time.