Gecko: a gender bias coefficient based interface design utility

Geko: gener bias coefficient based interface design utility

The gender bias coefficient value is based on the “Gini” coefficient, where 0 represents an equal distribution, where all the genders are equally represented/taken into account/pleased, and 1 when only one gender is represented.

How is the gbc computed?

Abstract

Gender topic

Introduction

The idea of this project is to provide the user interface designer a tool able to guide and help with the design of a gender-neutral design.

The main purpose of such tool is to make a designer **aware** of the gender bias coefficient (GBC) of a user interface based on some **criteria**, both *aesthetic* (Moss, G., Gunn, R. and Heller, J., “Some men like it black, some women like it pink: consumer implications of differences in male and female website design”, Journal of Consumer Behaviour, 5, 2006, pp. 328–341.) and *social* (where the **hell** was that **mentioned** on?), and **educate** and **guide** the user to shift the bias towards the expected target.

Criteria applied:

* Navigation issues
  + Number of links,
  + site map,
  + contents page,
  + subjects
* Language
  + Abbreviations,
  + self-denigration,
  + non-expert,
  + informal language
* Visual elements
  + Rounded shapes,
  + horizontal layout,
  + more colours for typography,
  + informal typography,
  + specific colours for typography.
  + Images depicting people of the target gender.
* Development
  + Designers (team) gender
  + Evaluation group gender

Since those parameters, especially the ones referred in the navigation group are dedicated to websites, we should allow for some of the parameters to be not applied.

Including GBC in design process

Design loop:

Analyse -> Design -> Build -> Evaluate

GBC can be considered before starting to build the prototype because it’s designed to access abstract factors that will probably affect the evaluation before it’s actually built.

Analyse -> Design -> GBC -> Build -> Evaluate

This however might include a novel approach to UX which is based on metered validation on final users. The idea would be to measure, for example using google analytics, the number of accesses and time spent using the user interface to validate the bias coefficient as it is computed by the Gecko application itself.

PACT

Activities

What is the overall goal of the activity ?

n  What has to be satisfied

n  Hedonic (for pleasure) vs. Pragmatic (towards specific goal)

? Temporal aspect

n  Length of time on tasks

n  Regular or infrequent

n  Continuous or interruptions

n  Processing time

? Cooperation

n  One or more actors involved

? Complexity

n  Well defined or vague ?

? Safety

n  Impact of error (how much?)

? The nature of the content

n  Type of data to be processed

n  Type of media

Context

? Where do the activities and interaction occur ?

n  Physical context

w  noisy, cold, wet, dirty, stressful, uses dangerous

materials, sunny

n  Social context

w  channels of communication, structure, centralization vs

decentralization, home, mobile, training materials

n  Organizational context

w  relationships with customers, other staff, effect on work

practices and job content

w  amount and type of support for activities

n  tuition, manuals, demonstrations, new knowledge,

new skills

Technologies

? Type

n  mobile, desktop

? Input

n  getting data in

n  getting commands

n  security

? Output

n  video vs. photographs

n  speech vs. screen

? Communication

n  between people

n  between devices

n  speed

n  real-time

? Content

n  what kind of data is in the system: a web site is all about content

People: Interface designers, they usually sketch stuff or use tools (Photoshop, Balsamiq)

Activities: keep track of submitted designs in terms of GBC, evaluate and address issues, also in team

Context: in the uffice, design process, where many different team members are included

Technologies: tools are mainly desktop based, even if tablet could be used. Web would allows users to easily access and share the tool in different places.

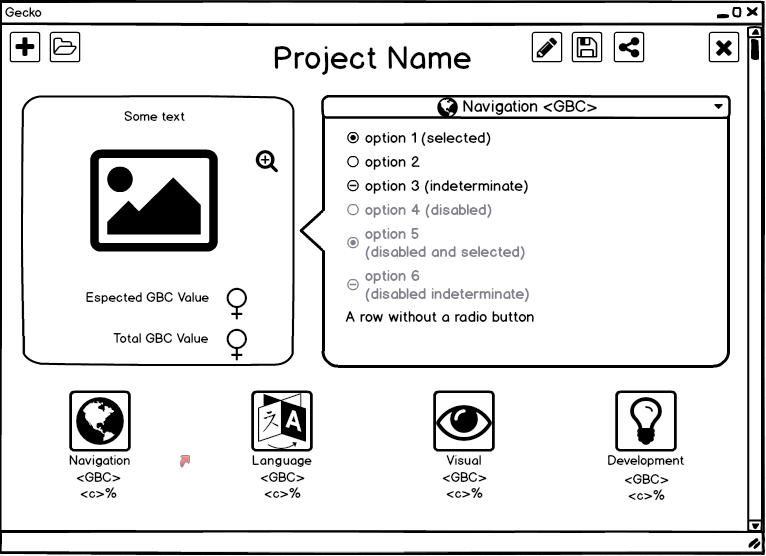
Personas

Sarah is a 72-year-old woman who lives with her

husband. She lives in a small house in Corbridge.

Sarah enjoys living in the rural community and has

a small number of friends who live nearby



Initially considered a generic user interface utility, it has become evident how much the web design played a role in the business. Confirm!