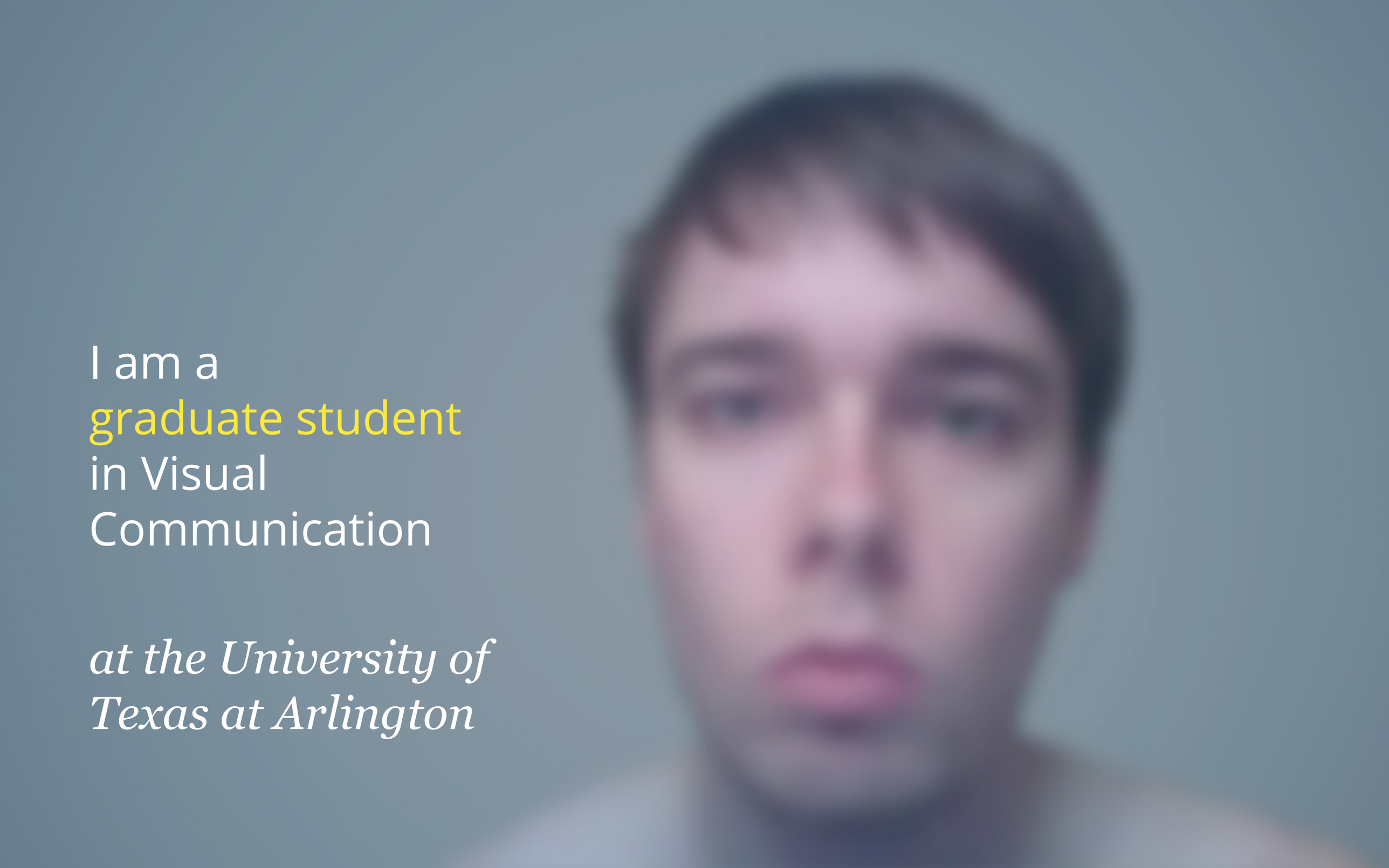
Kai ‘Opua

MFA Thesis
Visual Communication

authored by
Collin Hover

Hello,

my name is Collin Hover



I am a
graduate student
in Visual
Communication

at the University of Texas at Arlington

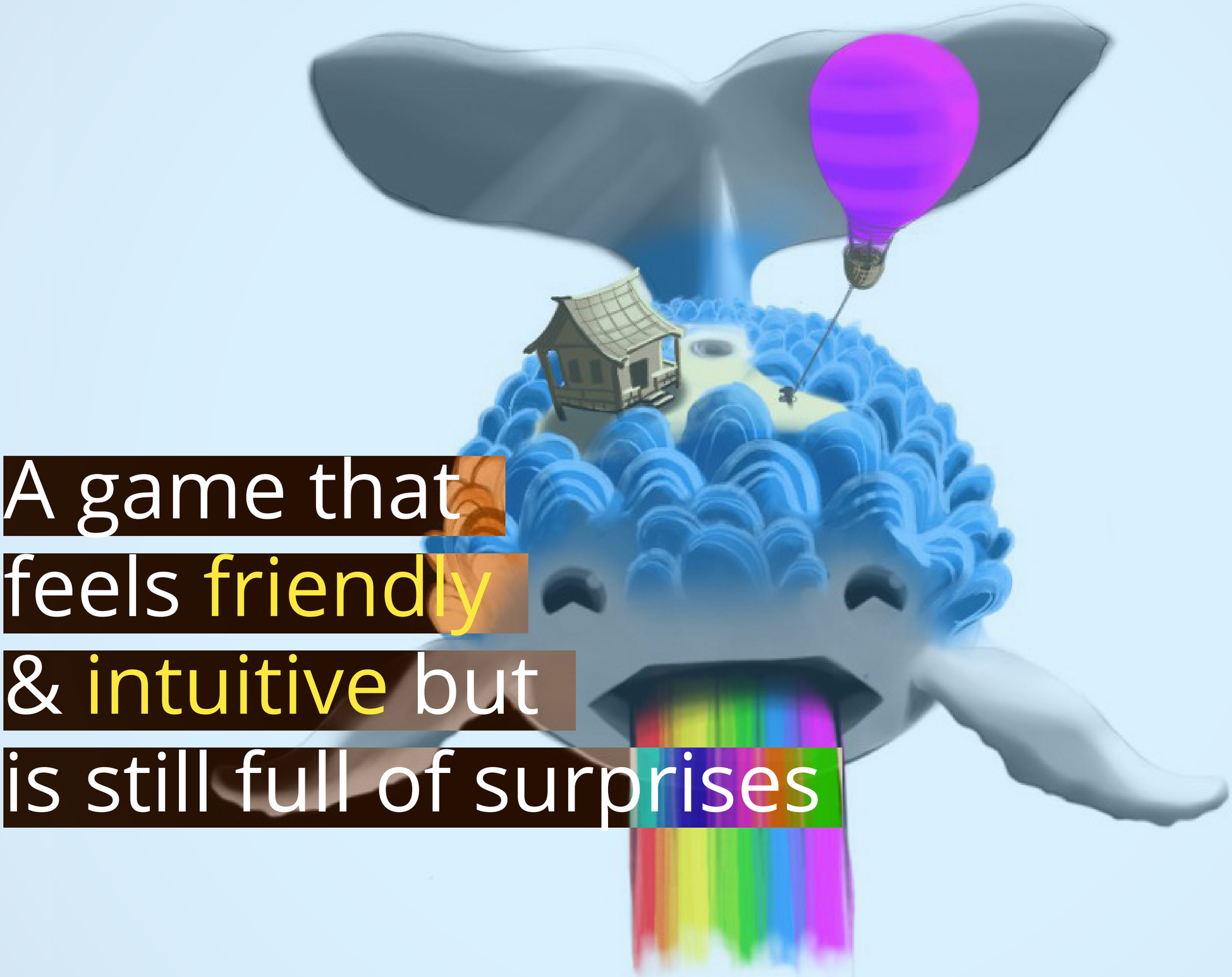
This project is a MFA

thesis

A 360 degree experience designed to be both meaningful and playful

A way to teach web design to an audience of ages 12 - 18

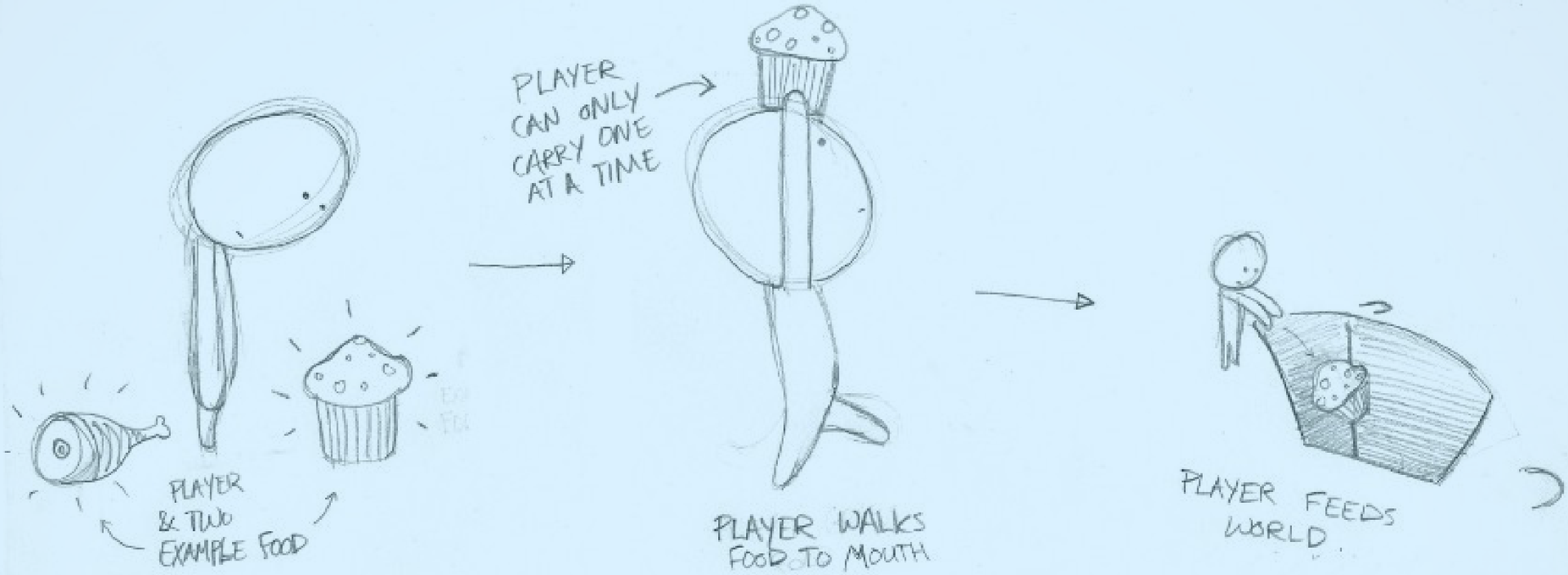
A website built to be accessed from anywhere



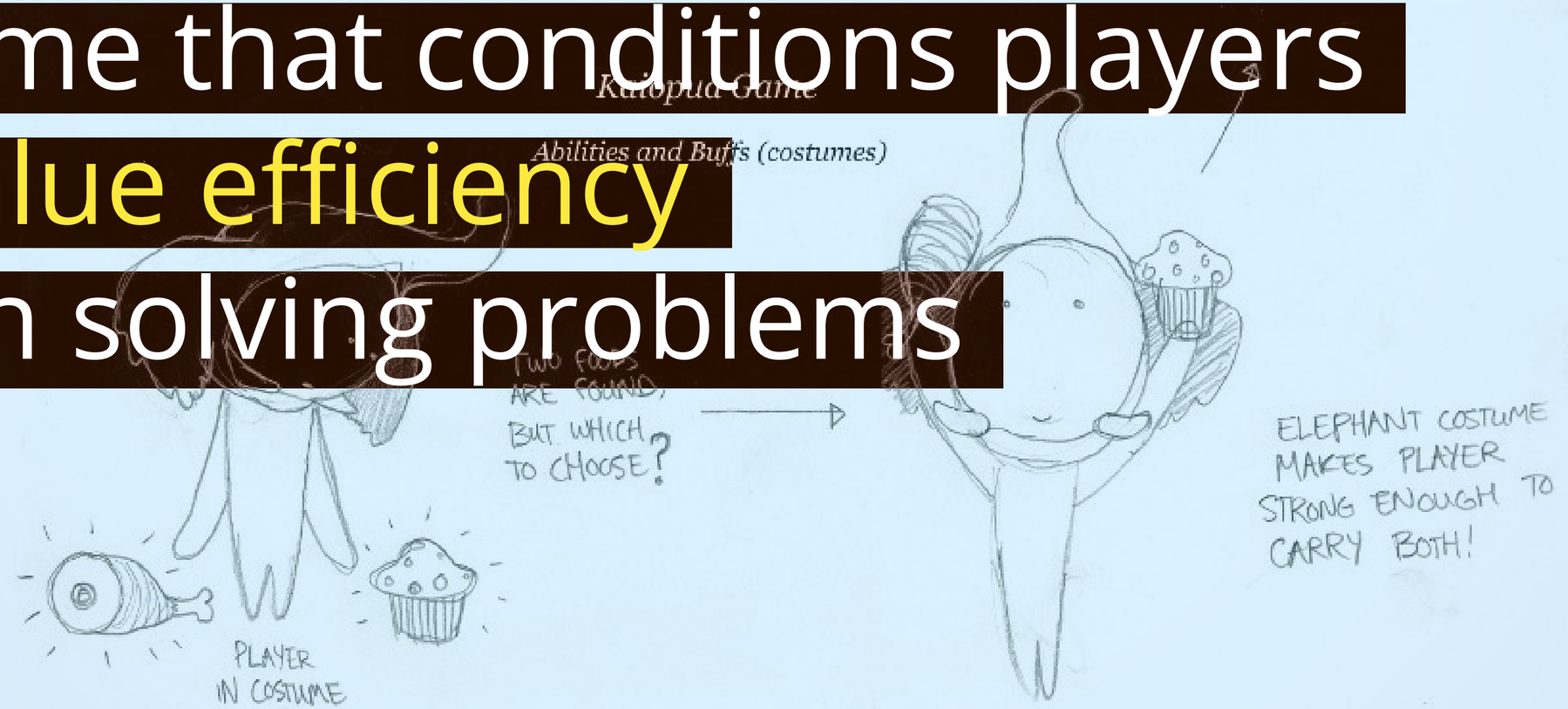
A game that
feels friendly
& intuitive but
is still full of surprises

A way to explain the importance of efficiency in visual communication

. . . is an extension of the foot



A game that conditions players to value efficiency when solving problems

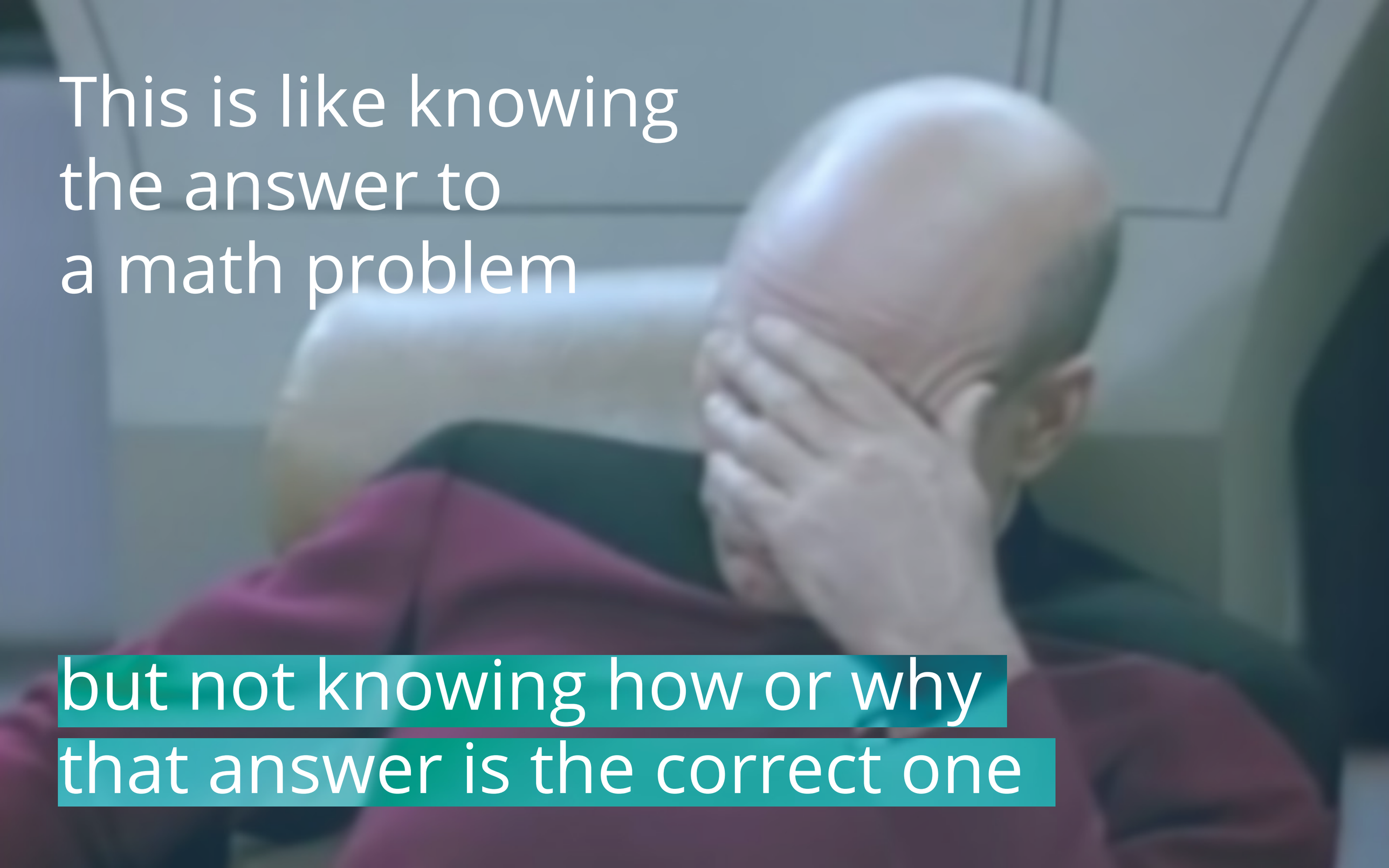



A game that gives the player
the ability to change
the size of any object

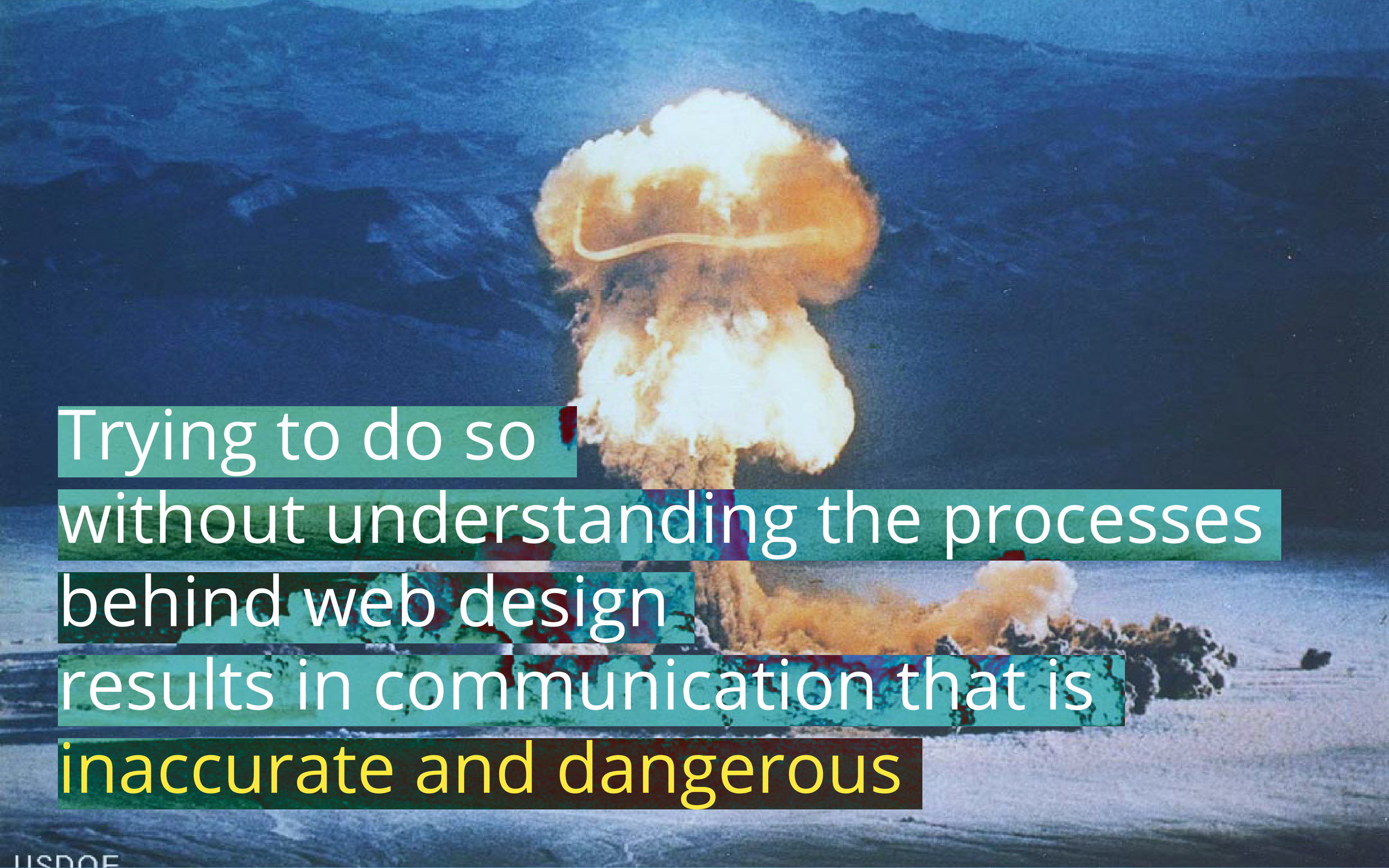
I want to tell you why this

matters

Students are proficient in
using digital tools to create websites,
but do not understand
the concepts behind the tools


This is like knowing
the answer to
a math problem
but not knowing how or why
that answer is the correct one

For the same reason, you cannot solve web design problems without first knowing how those problems work


Trying to do so
without understanding the processes
behind web design
results in communication that is
inaccurate and dangerous
USDOE

Web designers *(just like any other creative professional)*
have a mental framework they use
to understand problems
and create solutions

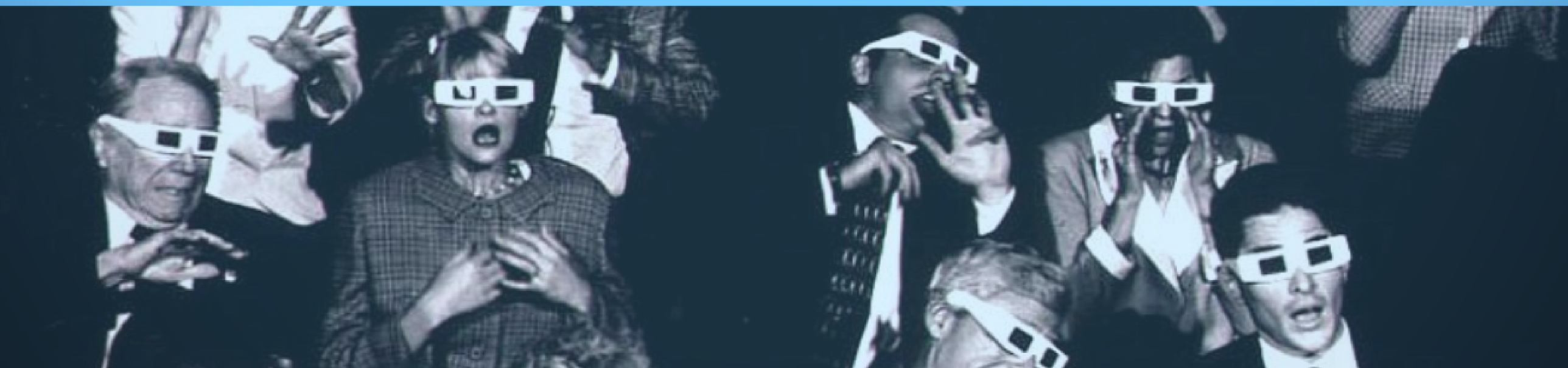
This involves a number of concerns such as:

structure,

function vs form,

& audience

(common to many designers)



This also involves special emphasis placed on values such as:

usability,

interactivity,

accessibility,

& efficiency

Usability

is walking a mile in someone’s shoes

to make a friendly solution

Interactivity

is reacting to someone’s choices to bring them an engaging solution

Accessibility

is knowing that you cannot
control someone's technology,
so we make a flexible solution

Efficiency

is understanding no one
has all the time in the world,
so we need a simple solution

And of all the aspects of
web design I've mentioned,

efficiency
has the clearest measure
of right and wrong

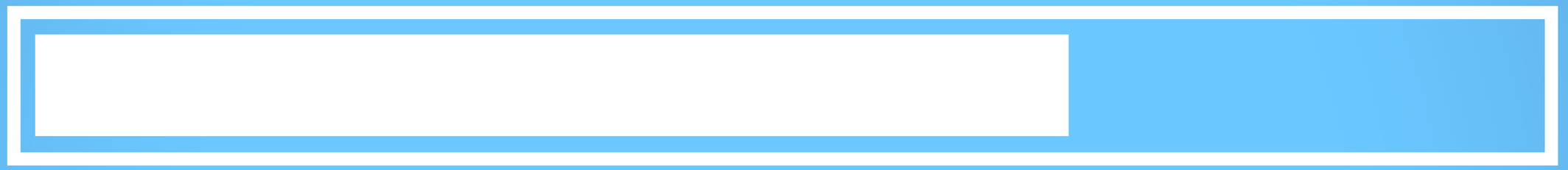
This is because we can quantitatively measure how

quickly, cleanly, and clearly

a goal is met *(p.s. this cake is great)*

This makes
efficiency a very strong candidate
for a game based learning situation

Within web design,
efficiency is minimizing the time someone spends doing unnecessary activities on a website



Waiting for the site to load is
by far the worst of these activities

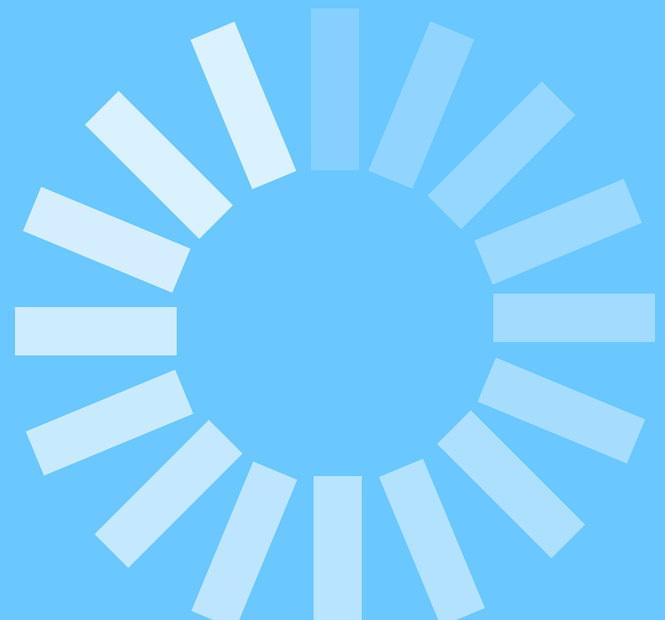
~~How fast can you download a website?~~

(this is a terrible question)

How long will someone wait for a website to load?

(this is a better question)

The key here is
the size of the resources
the website uses
to reach its goal

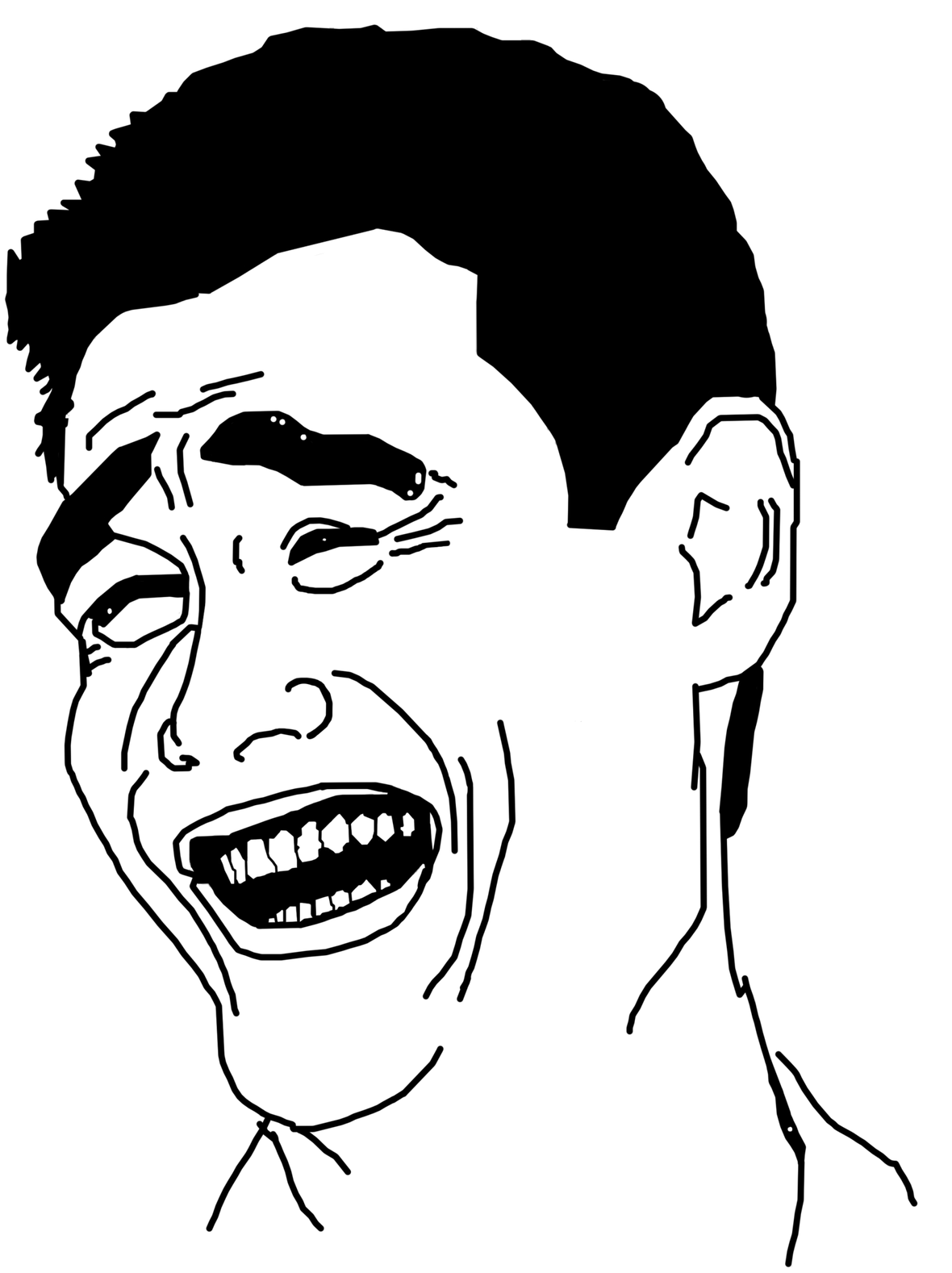


The more files we need
& the bigger they are,
the longer we have to wait

We care about someone's tolerance for waiting because

if someone doesn't wait for a website to load,

the website does not exist



The difficulty for a web designer is controlling the

& **size**

of the files

Because it isn’t as easy as

making everything as small as possible

or using the same image 100 times

Images need to be the right
size for the layout

And code files that the user
never sees should be minified

A web designer’s task of con-
trolling the size of resources is
mirrored in the game

Players will have the ability to change the size of objects in their environment to solve puzzles

This mechanic is very simple:
the player can either make an
object larger and heavier, or
smaller and lighter

Let me show you how

this works

A web designer has been asked to create a website for people to research high reso-lution images of rocks

Meanwhile, the game world, a giant space worm whale from Hawaii, is hungry and wants to eat a mossy boulder, but can’t get the boulder for itself

The web designer finds that
the images he has are so large
that they would take users
hours to load, and he knows
not even the greatest rock re-

However, if the web design-
er can’t find a solution before
the project deadline, he’ll be
out of a job!

In the other galaxy, our valiant player finds a colossal boulder covered in moss, but knows its too heavy to move

Our game player also knows
that he only has until sun-
down to find a solution, or
else the space worm will have
to eat him to survive!

Back in our web designer's world, he has resized his images so that users of his website can download them in seconds and still get enough

Thinking quickly, our game player zaps the boulder down into a small stone, just the right size for him to carry and still big enough to give the

Both the player and the designer have used efficient design thinking to remove barriers and create a smoothly flowing experience

In the game hero's case, his problem was the worm's hunger needs, and how he could deliver the correct food type in the right amounts before

On the web designer’s side, his problem was the research-er’s image needs, and how he could deliver the correct imag-es at a big enough size to use

Crisis averted!

I want this project to be

successful

A successful thesis in this case would be the solution that is both meaningful and playful

Players participating in a meaningful experience will choose to change the way they think

An obvious attempt at indoc-
trination will be instantly re-
jected by the player

Players participating in a play-
ful experience may be more
likely to adopt new informa-
tion

A third space is defined as somewhere between formal instruction and free play

Its suggested that the third space is optimal for meaning-ful experiences

Games are a very strong third space

Players enjoy themselves by successfully playing by the rules

In playing by the rules, a play-
er must use them to approach
problem solving

Two products will define this project as successful: a writ-ten discourse and a playable game

the writing

will attempt to explain:

the proposition that this game
will help players solve real
world web design problems

what real world web design problems exist that are difficult to solve

why these problems are diffi-
cult to solve and why it is dif-
ficult to teach others to solve
them

how this game will teach play-
ers to better approach these
problems

and as possible, real cases of
the success of the game

the Game

will be playable and include:

An animated character

a living world

A place for the character to live

as well as an environment

Working player movement and 3D physics

Working player ability to con-
trol the size of object in the
world

Colored visuals

A single puzzle that demonstrates why efficiency is important and how to use it

Limited game music and environment sound effects

I’ve tried to control the

visuals

The visual experience of the game has a heavy influence on the attitude of the player

The character and environ-
ment designs are all made to
communicate as much as pos-
sible with as little as necessary

They are also designed to be friendly and playful, so as to be approachable

As well as attempting to be strange and altruistic, so as to be interesting and believable

Influenced by

Hawaii

Calling the world ‘Efficient-Land-Ville’ would be like using a jack-hammer to drive in a nail

The setting should contrast
from reality to be interesting
but believable in its structure

Hawaii and Hawaiian culture is mysterious, attractive, and has high contrast from both western and eastern culture

Hawaiian culture is one I grew up in and worthy of sharing through tangential methods

Tangential learning is when a reference is made in the game to something that may also exist outside the game world, and the player researches

to give you an example, the game is name is my mid-dle name, Kai ‘Opua, which means clouds over the ocean

thank you

for listening