

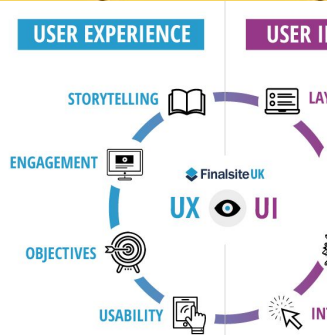
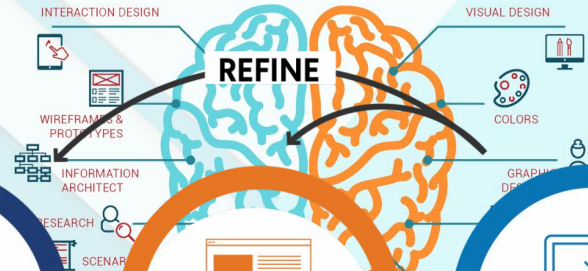
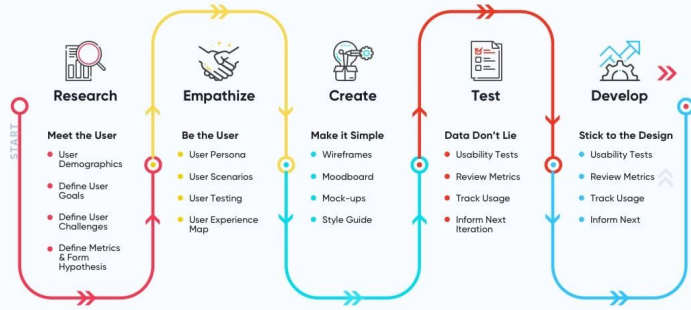
# how to design good\*

Christine Imogu & Helen Yang

\*good is subjective

# The User Experience (UX) & The User Interface (UI)

## USER EXPERIENCE DESIGN PROCESS



**DISCOVER**

**DESIGN**

**TEST**

**User Research**

**Prototype**

**Usability Testing**

Things to Consider

# Aesthetics (Font, Formatting, etc.)

If only there was  
a way we could  
*emphasize* it.

graceful **DARING** informal  
wistful contemporary  
hand-crafted **authoritative**  
friendly **PLAYFUL** personal  
trustworthy neutral **STRONG**

# Visuals



# Audio



pixabay



 soundstripe

# Styling / Theming



Do you have a  
consistent theme?  
Does it fit the idea?



# Noisy

GENERATED MUSIC

ADD TO DISCORD



Feedback



# Pusheen®



THE CAT

HOME

COMICS

CHARACTERS

SHOP

FUN

ABOUT

NEWS

Introducing  
A Very Special Collaboration:

## HELLO KITTY®



Pusheen®


SIGN UP FOR OUR NEWSLETTER!





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# Website Flow


# Example: Infinite Scrolling Feed








 Nicholas


 Nicholas Tsao


 Friends

 Saved


 Groups  
3 new


 Marketplace


 Watch  
9+ new videos


 See more


Your Shortcuts


 Zoom Memes for Self Quaranteens


 Science Memes


 MIT Asian Dance Team


 Mathematical Mathematics Memes



 Create Story  
Share a photo or write something.

 What's on your mind, Nicholas?



 Live video

 Photo/video


 Feeling/activity


 Science Memes  
Aaisha Ali · 1h · 


Every raccoon is either planning a heist or in the middle of a heist.




Your Pages


 Named Organic Memes for Alec's Personal Computer Teens


 2 Notifications


 Create promotion


Contacts


 Tony Cui


 Michelle Liang


 Dylan Liu


 Claire Cheng

 Albert Xing

 Disha Kohli

 Frankie Schulte

 Pranav Arunandhi



# Example: Main Screen



Intuitive Use / Control

Do buttons make  
sense? Is it obvious to  
click them?



Please enter your phone number:

A horizontal input field for a phone number. It consists of a light gray bar with a small rectangular cursor box in the center. The cursor box contains three horizontal lines, indicating it is ready for text input.


2158559745

# Responsiveness

Do users feel like they  
are in control?

Example: Styling  
hover and click



 Duolingo - The world's best way to learn a language

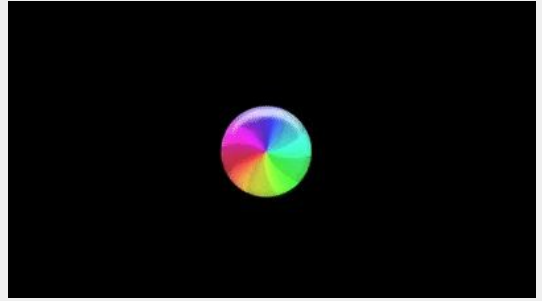
SITE LANGUAGE: ENGLISH ▾



## GET STARTED

# JS Event Loop & Asynchronous Functions:

Avoid the Circle of Doom



Handling Edge Cases ★

Bad internet  
connections





User

What if you close the  
tab at random times?  
Does your progress  
save? Does it break?



What if you open  
web pages that  
should only be  
accessed in  
certain ways?



What if you leave the  
tab open too long and  
it logs you out?



What if you open  
multiple tabs of the  
same page?



And more...

Try to think of every  
way to break your app

# Lag & Optimization

(Braum): Ping is 182 ms

(Braum): Ping is 1964 ms

(Braum): Ping is 99644 ms

(Braum): Ping is 145199354 ms

(Braum): Ping is 235623671256963544 ms

(Braum): Ping is 99992036290362906209426023221481ms



How do we fix this?

Minimize  
unnecessary &  
repetitive  
computations



Bundle  
communication  
into packages



Client should do  
as much as it can  
without server  
communication





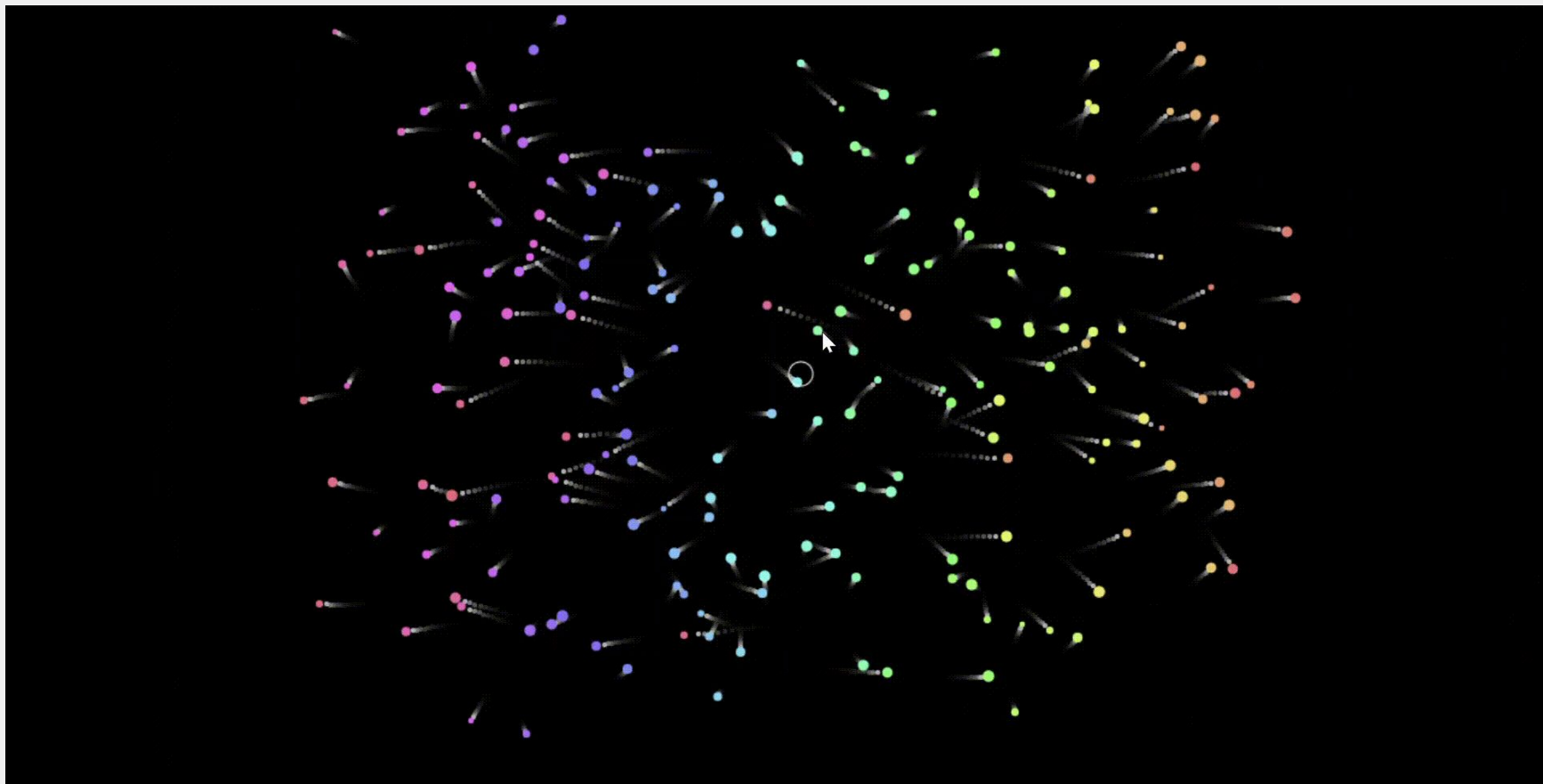
```
if (oldSocket.id === socket.id) {  
  // there was an old tab open for this user, force it to  
  // FIXME: is this the behavior you want?  
  oldSocket.disconnect();  
  delete socketToUserMap[oldSocket.id];  
}  
  
userToSocketMap[user._id] = socket;  
socketToUserMap[socket.id] = user;  
;  
  
const removeUser = (user, socket) => {  
  if (user) delete userToSocketMap[user._id];  
  delete socketToUserMap[socket.id];  
};  
  
module.exports = {  
  init: (http) => {  
    io = require("socket.io")(http);  
  
    io.on("connection", (socket) => {  
      console.log(`socket has connected ${socket.id}`);  
      socket.on("disconnect", (reason) => {  
        const user = getUserFromSocketID(socket.id);  
        removeUser(user, socket);  
      });  
    });  
  });  
};
```

Feel

“It feels satisfying”



Animations, Particle  
Effects, Screen Shake,  
Vivid Colors, etc.



Pusheen®



THE CAT

COMICS

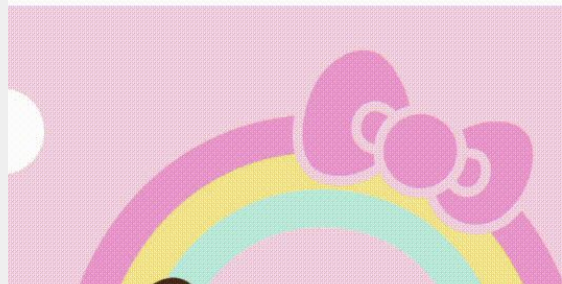
CHARACTERS

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Sound / Music

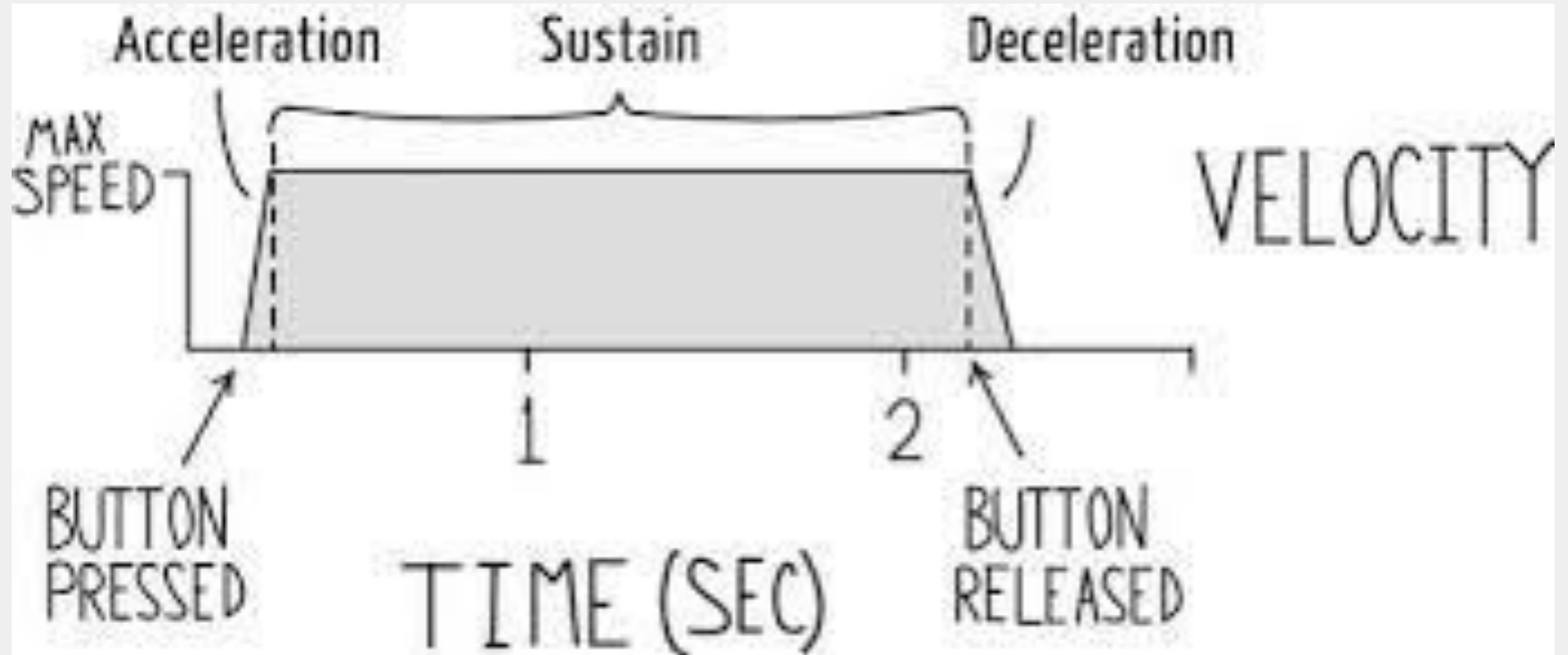
# Fluid / Natural Movement



# Example: Games



## Movement Curves



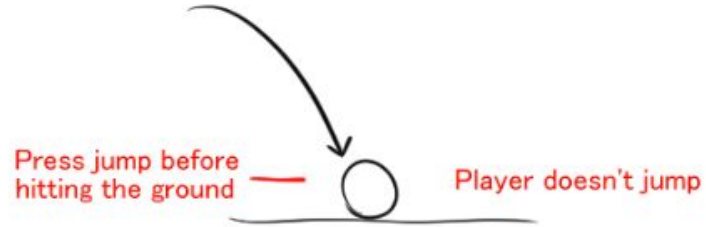
# Input Buffers



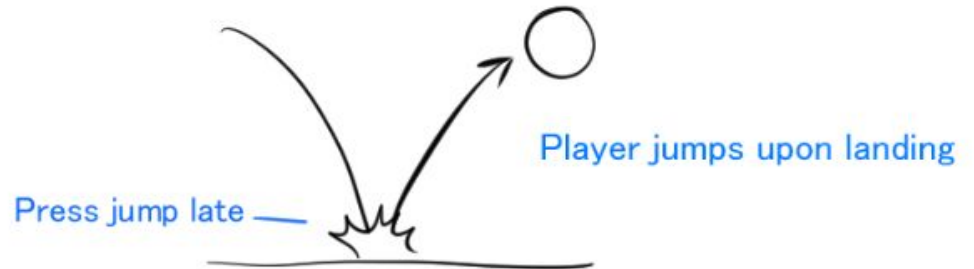


# Input Buffers

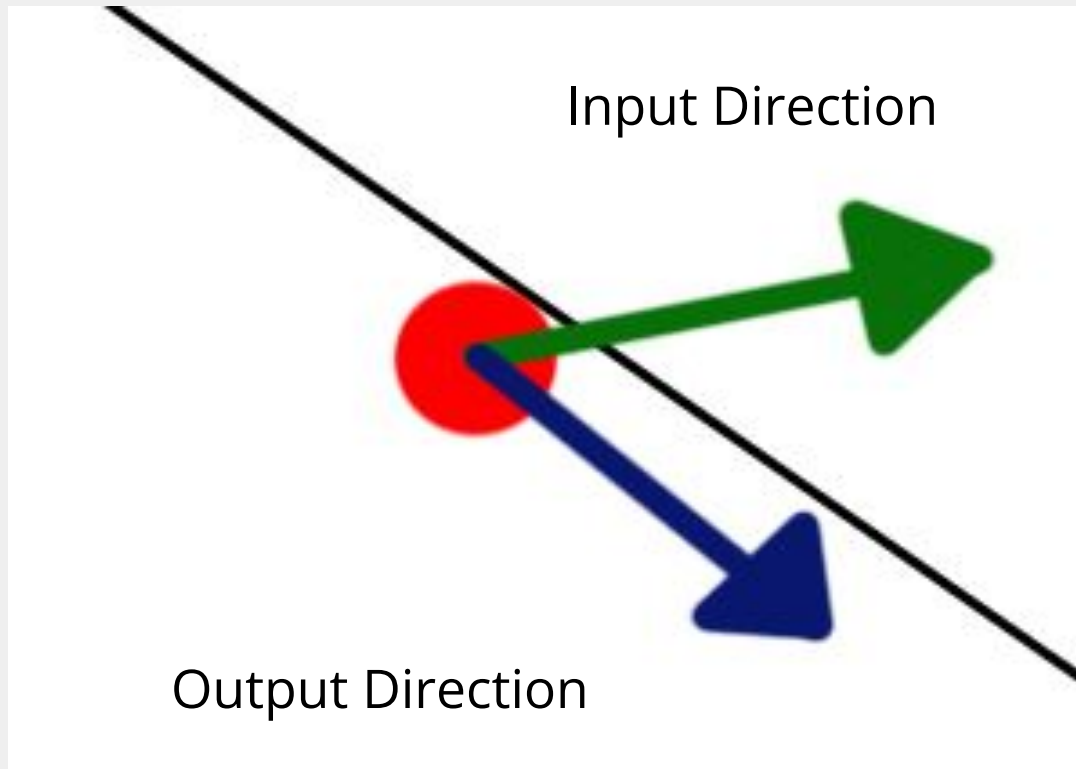
No buffer



Buffered input



# Wall Sliding



Final Remark

It's easier to enjoy the  
idea when the  
implementation is good.

Have Fun!