

CIS2170 USER INTERFACE DESIGN

UNDERSTANDING USERS & CONTEXT PART II



WEEK 3 CLASS 2

Slides by Dr. Gillis and Dr. Zhao
Artwork by Lilian Shi



IN TODAY'S CLASS:

- OVERVIEW - TOOLS FOR USER CENTRED DESIGN
- PERSONAS



Menti

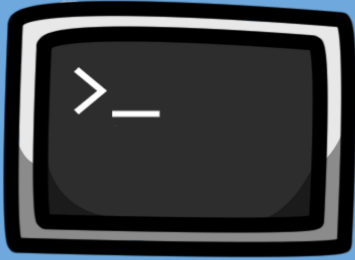


RECALL!



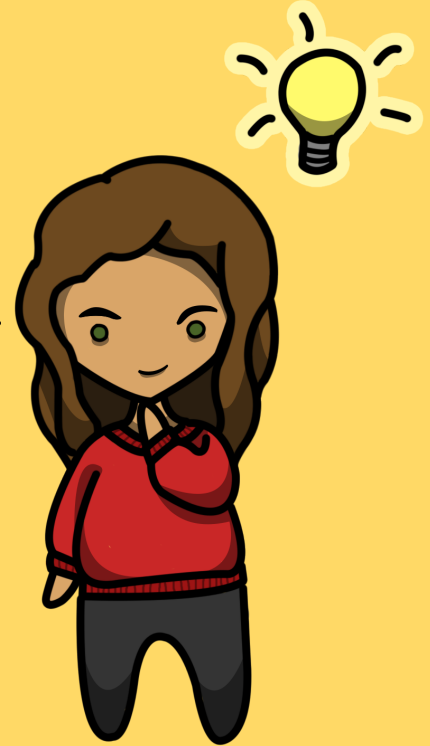
FOUR ESSENTIAL ELEMENTS OF USER-CENTRED DESIGN

- VISIBILITY
- ACCESSIBILITY
- LEGIBILITY
- LANGUAGE



TOOLS FOR USER CENTRED DESIGN

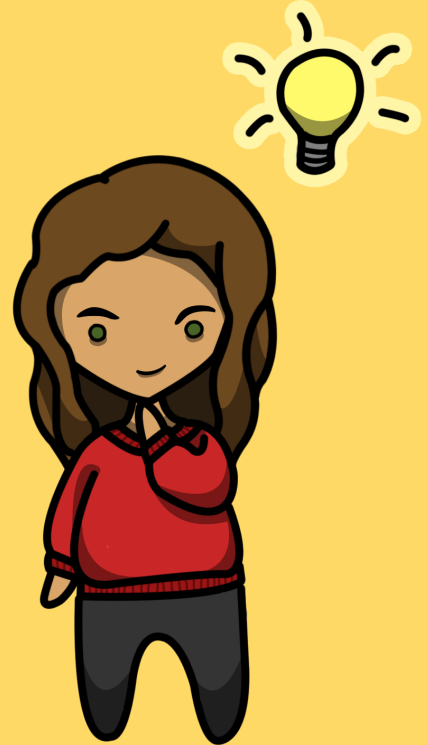
There Are Several Different “Tools”
That We Can Use When We Are Approaching
Design From A User-Centred Perspective



These Include:

Personas
Scenarios
Use Cases

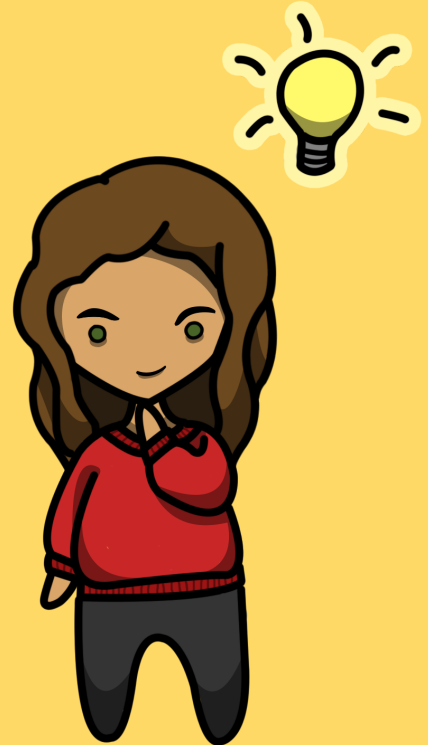
And We'll Touch On Each Of These
Over The Next Few Classes

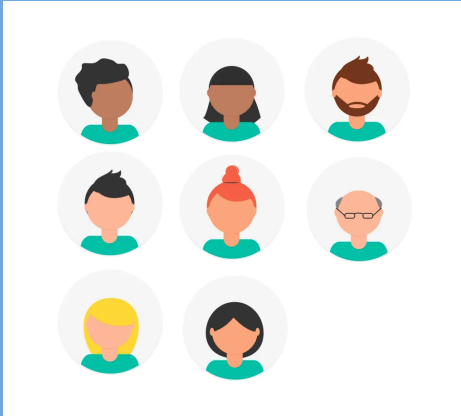


Personas - fictional characters informed by evidence

Scenarios - “a day in the life of...” (typical/
best case/worst case)

Use case - things an actor of our system
does, and how the system responds



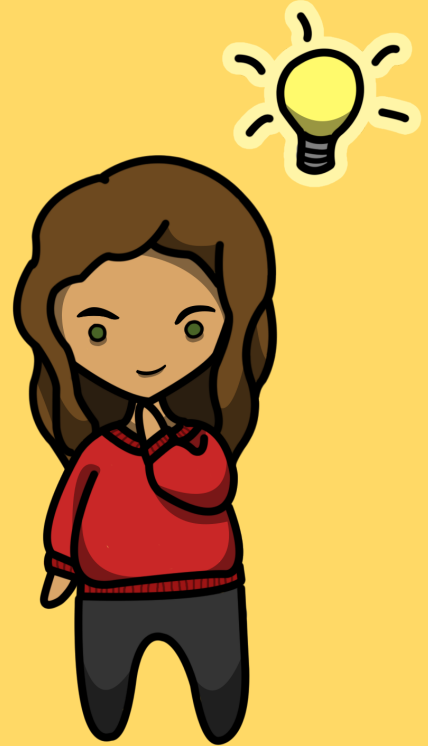


PERSONAS

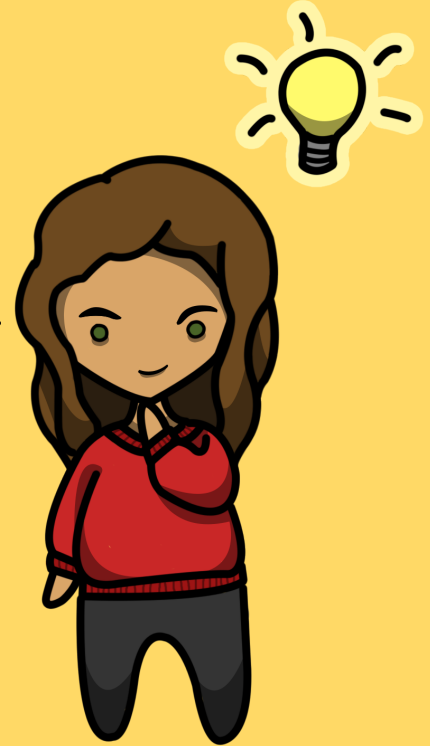
Reading - <https://www.nngroup.com/articles/personas-study-guide/>

Personas

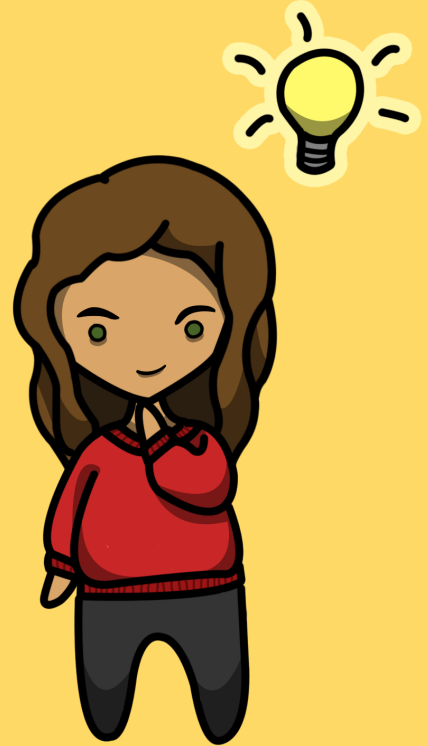
- Fictional Characters Informed By Evidence
- Help Us Connect With The Real Humans Behind Our Interfaces



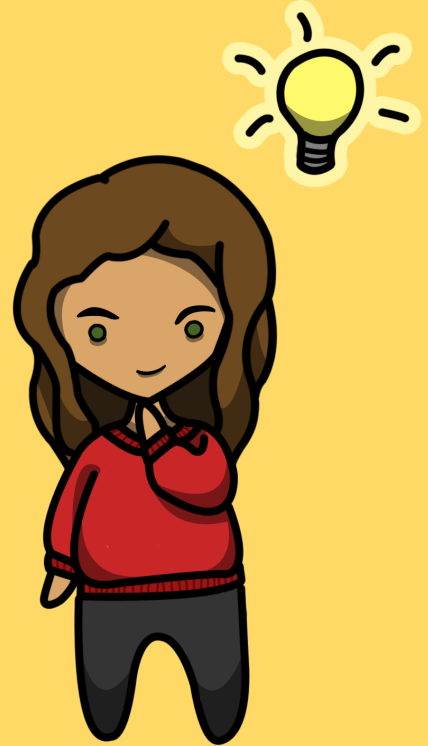
- They Are Given Names, Pictures, Demographics, Roles, Tasks, Job Descriptions, Behaviours, Goals, Motivations
- Their Pain Points Or Challenges Are Described



- Their Technological Proficiency Is Described
- Where/How They Work Can Also Be Described



- They Can Be Given A Background Story - Which Makes The Persona More Realistic And Relatable





MARK, 22

DEMOGRAPHICS



Rents a 2 bedroom apartment in uptown Charlotte, NC with cat and television from his parents.



Currently an intern for a large sports management company and a bar tender at a high end cocktail bar on the weekends.



Recently single and using dating apps. An only child and moved a dozen 4 months ago.



Graduated with a B.S in sports business from UNC-Ch. Owns \$20,000 in private loans.

BEHAVIORAL IDENTIFIERS



Hobbies include eating out, offing weights, playing club tennis, drinking draft beer, following for UNC, and watching live music.



Prefers chat systems for customer service and support. Values quick responses and 24 hour availability.



Wants free shipping. Values a low price. Prefers online marketing, light colors, and simple websites.



Shops online between 7pm-9pm. Shops during pay periods at the end of the month and often uses promo codes.



Owns an Android and shops on mobile with referrals from social media such as Instagram and Facebook.



Studied abroad in China. Can speak Spanish and some Italian. Travels on a budget and prefers hotels to hotels.



Personal goals to be out of debt by 2020, to be engaged in 4 years, and to work in a university sports medicine department.



Very fit and active but has a bad diet due to eating on a budget and drinking often. Reads self health information daily.



JUSTIN, 31

DEMOGRAPHICS



Rents a 2 bedroom apartment in uptown Atlanta with his partner. Seeking to buy a home near job.



Works and lives in a condo in a 5 star hotel as a superintendent with a net income of \$100,000.



Recently engaged to his girlfriend of 5 years with plans to marry in NYC in the winter.



Graduated from a community college with honors and held office in 3 on-campus clubs.

BEHAVIORAL IDENTIFIERS



Hobbies include vegan cooking, yoga, monthly massages, playing the drums, volunteering, drinking cocktails and watching live at play.



Prefers to call for customer service and support. Values follow up summary emails and easy to read directions.



Wants free shipping on large orders. Values quality and privacy. Extremely brand loyal. Prefers email marketing.



Shops online between 8pm-9pm and makes multiple returns. Uses Passport at checkout.



Owns an iPhone and tablet. Shops on the tablet with referrals from email marketing and promotions.



Travels in the USA twice a year to visit family in Maine and California. Prefers long road trips and holiday travel.



Personal goals to become a general manager within 4 years and to purchase a suburban home after his wedding and honeymoon.



Considers very healthy and with local products. Has great self care and is very active.



MAGGIE, 52

DEMOGRAPHICS



Owns a 4 bedroom home in coastal NC and 2 high end cars. Lives in a suburban gated neighborhood.



Human Resource Director of a small media company for 8 years with a \$80,000 salary.



Married for 12 years with 2 sons and a house hold income of above \$100,000.



Well educated with an MBA degree from a state university. Graduated without debt.

BEHAVIORAL IDENTIFIERS



Hobbies include reading, playing tennis, networking at the country club, being involved in youth groups and visiting the beach.



Strong need for customer service and support. Values face to face communication and reusable systems.



Wants a simple product, values quantity and brand image. Prefers price matching and better graphics.



Shops in department stores after 5pm. Shops to buy on sale items. Reflected by a premium client.



Owns an iPhone but makes purchases online with a desktop. Her computer. Needs a simple check out system.



Well traveled in Europe. Prefers traveling in off peak times to enjoy hotels and make pre-planned travel like cruises.



Personal goals to retire by age 65, to own a vacation home on the Spanish Islands and for her sons to attend an Ivy League university.



Is very good health but very busy and often stressed. Needs great exercise programs.

Assaf

About

- 👤 28 Years old.
- 💰 9K per month.
- 🏠 Rent apartment in Tel Aviv
- 💻 Medium- High Tech proficiency.

Why he get to the market ?



“ I love doing my shopping at the market, but I wish to finish it quickly so I could get something to eat ”

2-3

Per month
Market visits

Core Needs

- Find exactly where are the groceries he wants.
- Remembers where to find each shops he liked.
- Makes shopping faster with direct route.
- Finds a vegetarian place to eat.
- Find a new and recommended place to eat.

Motivation

- Loves the market vibes and variety.
- Usually finds something new to try.
- Easy access to things he needs
- Love the market location and like to hang around after he finishes shopping.

Pain Points

- Have a hard time to find a restaurant that serve vegetarian food .

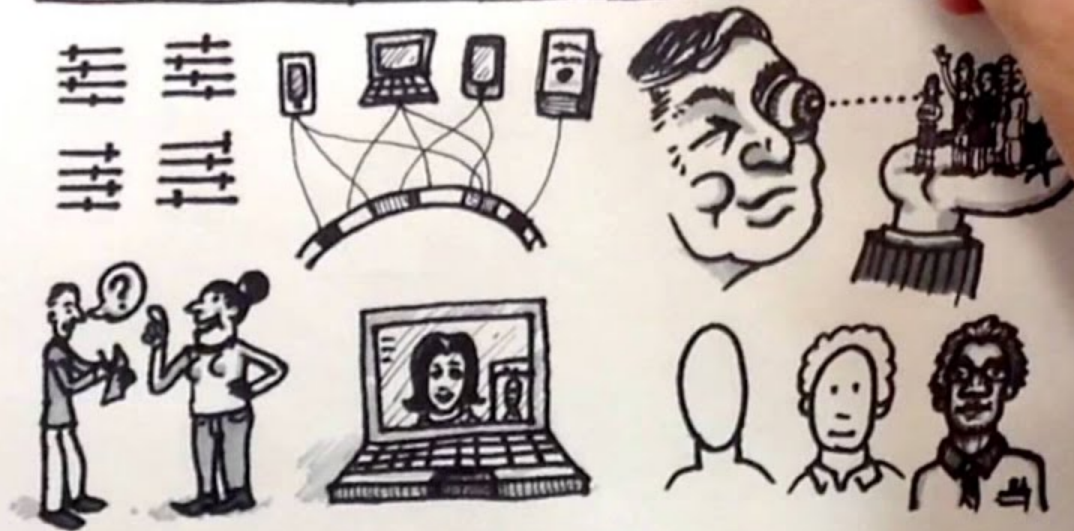
Gregg Bernstein ? Personas

A persona is a representation
of a type of customer.

Who
are we
designing
for?

persona Analysis

Industry	Device	Time	Goals	etc		
Web	Web	Web	Web	Web		
Web	Web	Web	Web	Web		
Web	Web	Web	Web	Web		



EMPATHY
BUILDING

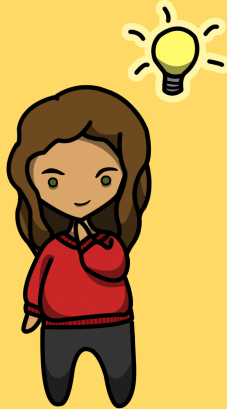
GUIDED
DECISION
MAKING

Personas Help Designers
And Developers Empathize
With The Users, Leading To
More User-Centred Products

ENHANCED
COMMUNICA
TION

FOCUS ON
USER NEEDS

WHY DO WE USE
PERSONAS?



EMPATHY
BUILDING

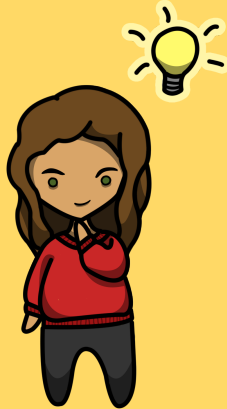
GUIDED
DECISION
MAKING

Personas Provide A Clear
Understanding Of The User
Needs And Behaviours
(Based On Evidence) Which
Guide Design Decisions

ENHANCED
COMMUNICA
TION

FOCUS ON
USER NEEDS

WHY DO WE USE
PERSONAS?



EMPATHY
BUILDING

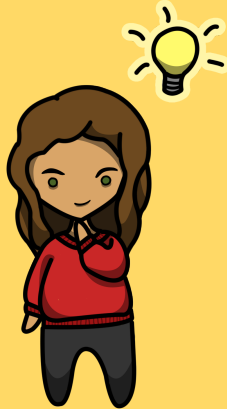
GUIDED
DECISION
MAKING

ENHANCED
COMMUNICA
TION

FOCUS ON
USER NEEDS

Personas Provide A
Common Language For
Teams To Discuss User
Needs And Experiences

WHY DO WE USE
PERSONAS?



EMPATHY
BUILDING

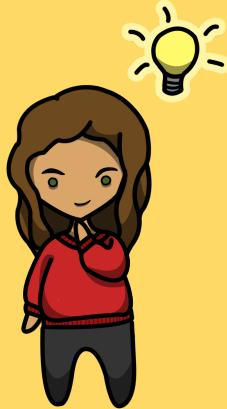
GUIDED
DECISION
MAKING

ENHANCED
COMMUNICA
TION

FOCUS ON
USER
NEEDS

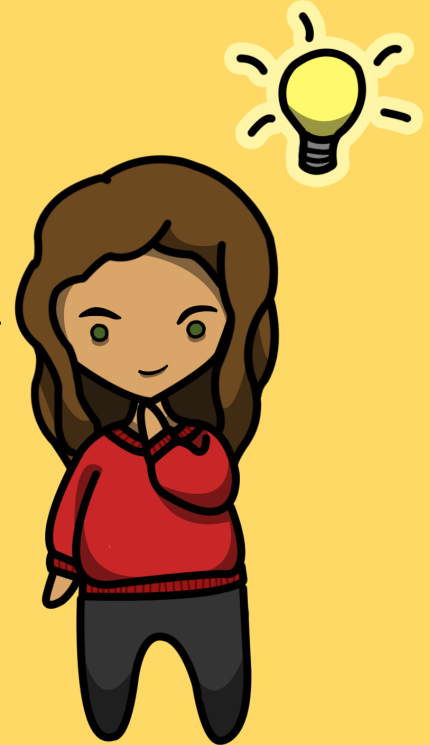
Personas Keep Focus On
User Needs Throughout The
Design Process

WHY DO WE USE
PERSONAS?

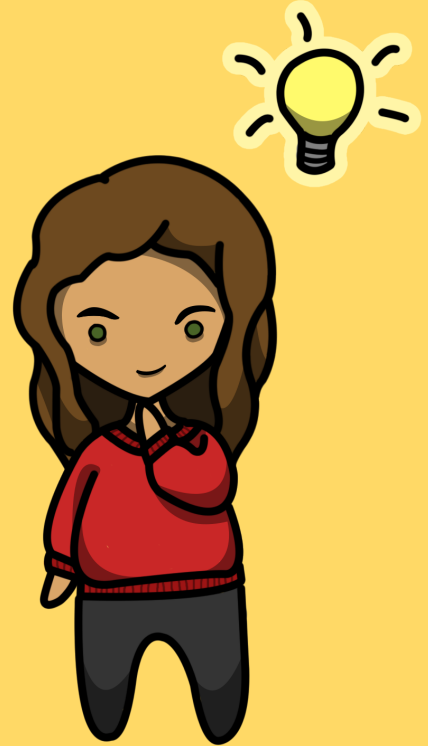


There Are Many Types Of Personas

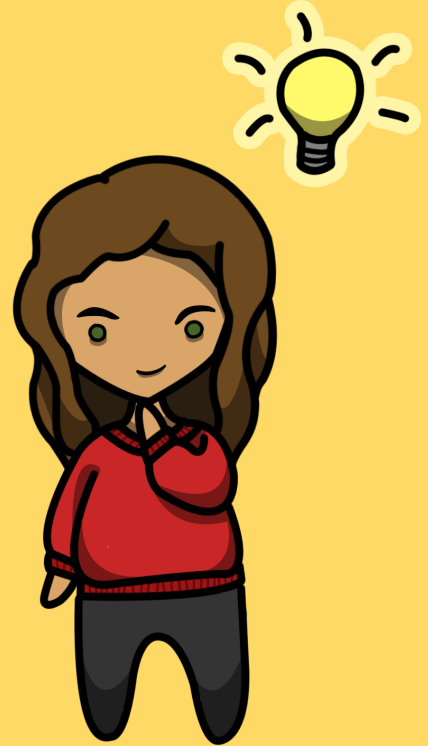
- Primary — the main targets of experience design (can be more than one)
- Secondary — mostly satisfied with the requirements of the primary personas, but not entirely.
- Customer — buyer group
- Served — not users of the product but are directly affected by the use of the product
- Negative — users that the product is not built to serve



- Get Into Groups
- Consider **WebAdvisor**
- Identify The Primary, Secondary, And Negative Users Of WebAdvisor

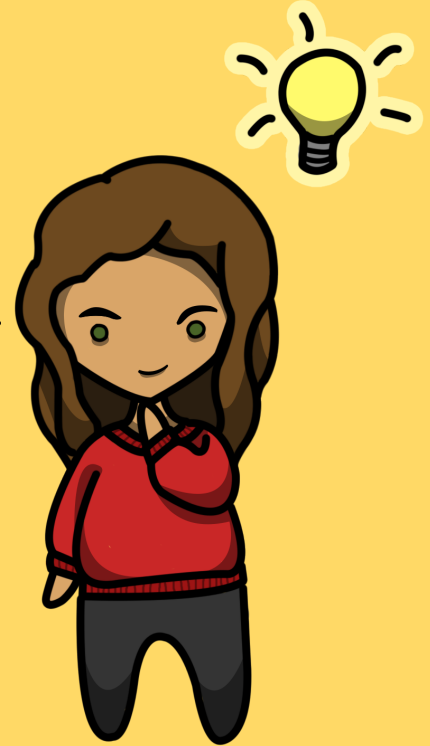


Since This Is A Redesign, And We Have
Some Experience With WebAdvisor, We'll
Start By Asking The Question - **Who Uses
WebAdvisor?**



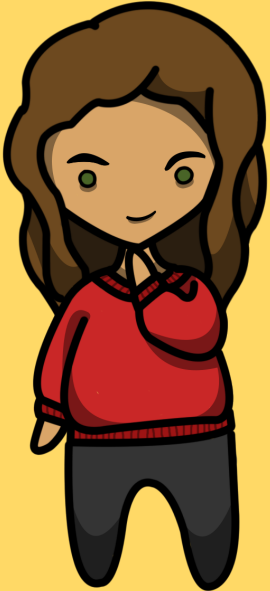
To Do This, We Can Search For Evidence
That We Might Use To Inform Our Personas

We Do This By Specifically Looking For
Evidence To Answer The Questions We
Discussed In Lecture 5



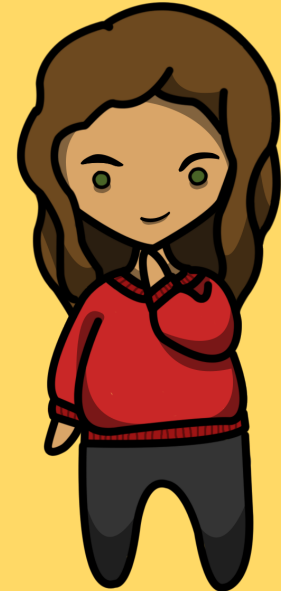


Consider creating a table that we populate with evidence (links and short summaries)



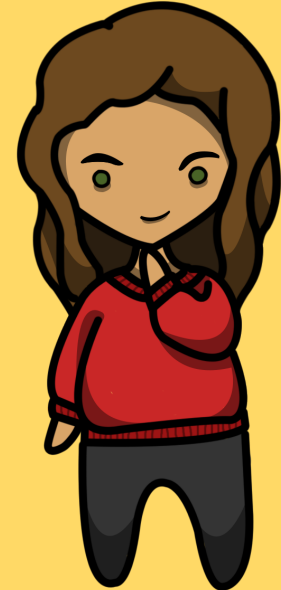
	Primary (Students, Planning & Registration Staff)	Secondary (Professors)	Negative (Non UofG folks, Alumni)
Demographics	60% women, 22594/26152 FT undergrads, 2910/3138 FT grads, 4.7% and 19.7% international undergrad/grad respectively, 92.2%/70.9% from Ontario (undergrad/grad)... (2021)	836 faculty in 7 colleges from 41 countries. 40% women. 322 full professors, 342 associate professors, 172 assistant professors. 79% tenured faculty... (2021)	
Goals			
Current Solutions/Pain Points			

Consider creating a table that we populate with evidence (links and short summaries)

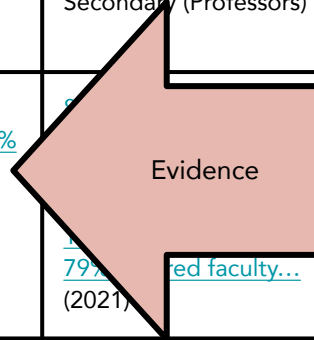


	Primary (Students, Planning & Registration Staff)	Secondary (Professors)	Persona Types
Demographics	60% women, 22594/26152 FT undergrads, 2910/3138 FT grads, 4.7% and 19.7% international undergrad/grad respectively, 92.2%/70.9% from Ontario (undergrad/grad)... (2021)	836 faculty in 7 colleges from 41 countries. 40% women. 322 full professors, 342 associate professors, 172 assistant professors. 79% tenured faculty... (2021)	
Goals			
Current Solutions/Pain Points			

Consider creating a table that we populate with evidence (links and short summaries)



	Primary (Students, Planning & Registration Staff)	Secondary (Professors)	Negative (Non UofG folks, Alumni)
Demographics	60% women, 22594/26152 FT undergrads, 2910/3138 FT grads, 4.7% and 19.7% international undergrad/grad respectively, 92.2%/70.9% from Ontario (undergrad/grad)... (2021)	8... ...ors, ... 79% ...ed faculty... (2021)	
Goals			
Current Solutions/Pain Points			



	Primary (Students, Planning & Registration Staff)	Secondary (Professors)	Negative (Non UofG folks, Alumni)
Demographics	60% women, 22594/26152 FT undergrads, 2910/3138 FT grads, 4.7% and 19.7% international undergrad/grad respectively, 92.2%/70.9% from Ontario (undergrad/grad)... (2021)	836 faculty in 7 colleges from 41 countries. 40% women. 322 full professors, 342 associate professors, 172 assistant professors. 79% tenured faculty... (2021)	GAP
Goals	<Evidence>	<Evidence>	GAP
Current Solutions	GAP	<Evidence>	<Evidence>
Usage Context	GAP	<Evidence>	GAP
Device Preferences	<Evidence>	<Evidence>	<Evidence>
Key Features	<Evidence>	GAP	GAP
Legal Issues	GAP	<Evidence>	<Evidence>
Design Preferences	<Evidence>	<Evidence>	<Evidence>
Feedback / Updates	GAP	GAP	<Evidence>

After extensive research, this table can help you identify gaps

Gaps that can be filled with the methods discussed in lecture 5



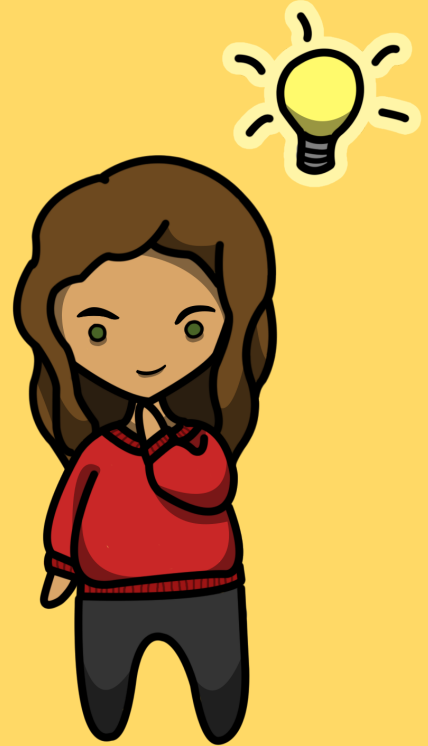
	Primary (Students, Planning & Registration Staff)	Secondary (Professors)	Negative (Non UofG folks, Alumni)
Demographics	60% women, 22594/26152 FT undergrads, 2910/3138 FT grads, 4.7% and 19.7% international undergrad/grad respectively, 92.2%/70.9% from Ontario (undergrad/grad)... (2021)	836 faculty in 7 colleges from 41 countries. 40% women. 322 full professors, 342 associate professors, 172 assistant professors. 79% tenured faculty... (2021)	SURVEY
Goals	<Evidence>	<Evidence>	SURVEY
Current Solutions	INTERVIEW	<Evidence>	<Evidence>
Usage Context	OBSERVATION	<Evidence>	SURVEY
Device Preferences	<Evidence>	<Evidence>	<Evidence>
Key Features	<Evidence>	FOCUS GROUP	SURVEY
Legal Issues	RESEARCH	<Evidence>	<Evidence>
Design Preferences	<Evidence>	<Evidence>	<Evidence>
Feedback / Updates	SURVEY	SURVEY	<Evidence>

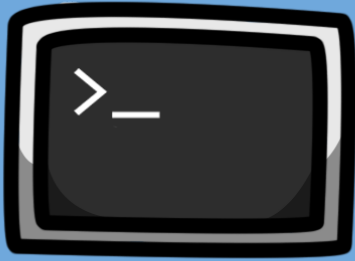
But remember, this will all depend on how much time and money you have



In your groups

Write a short paragraph about the
Primary Persona for WebAdvisor

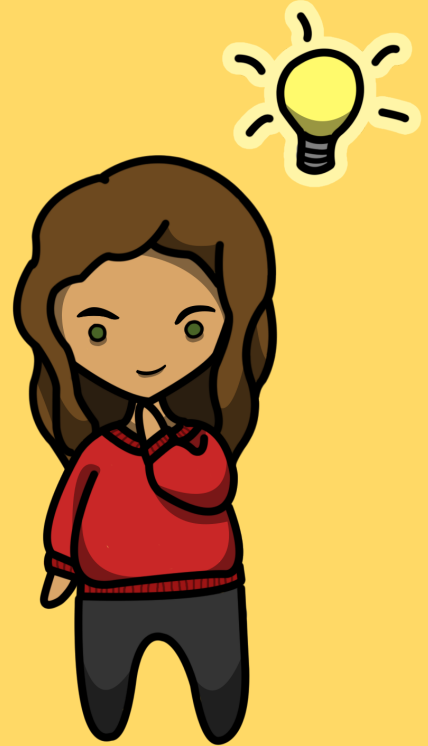




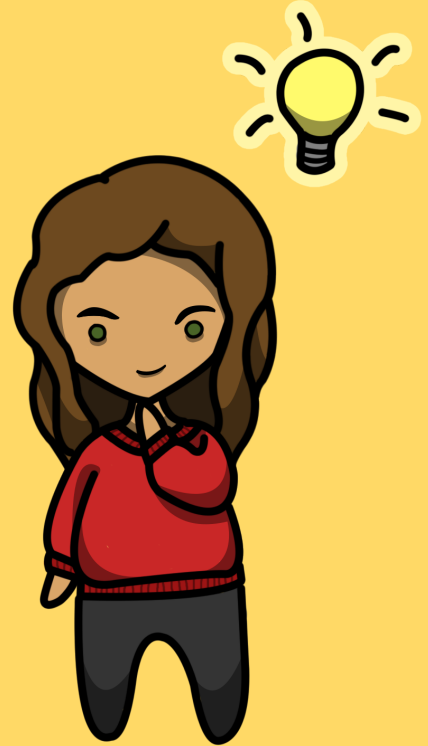
BIAS

Consider The Following:

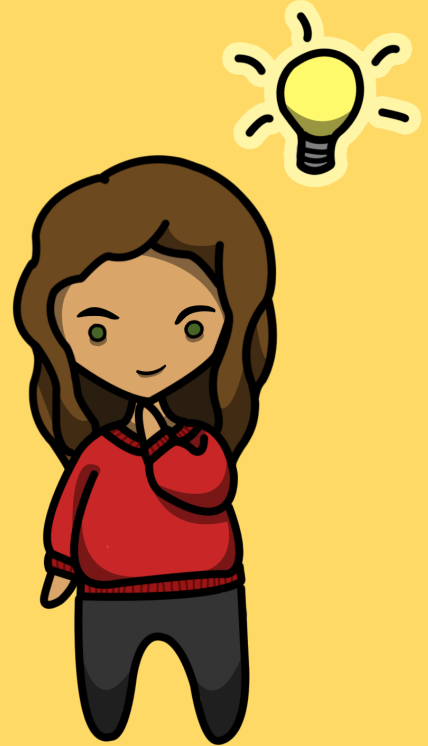
You Have Been Hired To Design A Dinner
Menu For Valentine's Day Weekend For A
Local Pub



To Inform The Design Of Your Menu, You
Decide To Develop Primary, Secondary, And
Negative Personas For The Restaurant

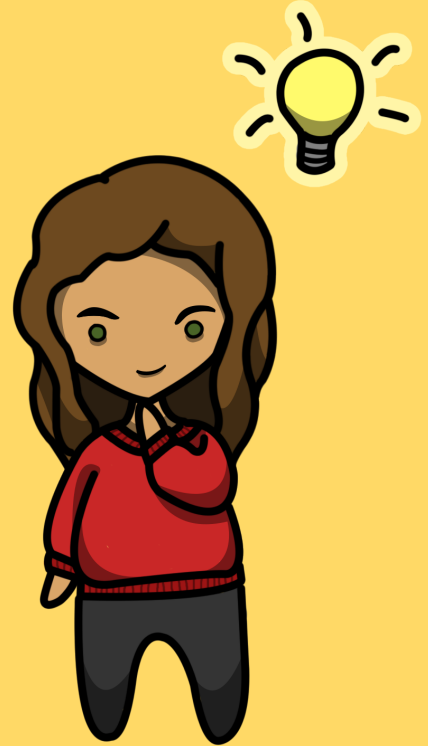


Let's Consider **Who Wouldn't Go To The Restaurant** - That Is, Let's Describe The **Negative Persona**

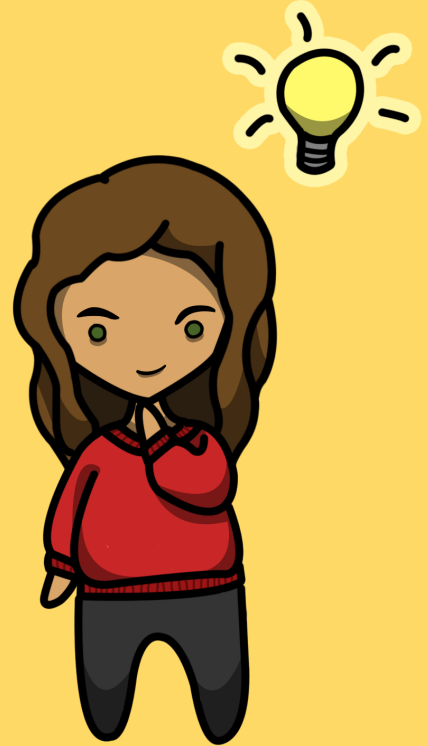


Get Into Small Groups

Write A Short Paragraph About The Negative
Persona

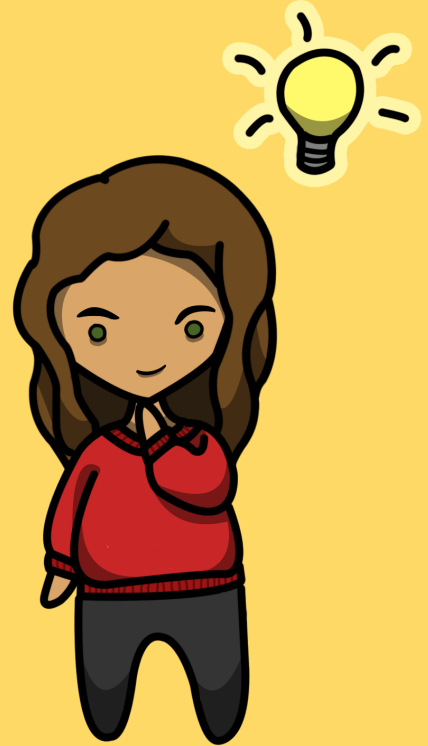


What Evidence Do You Have To Support
Your Personas?

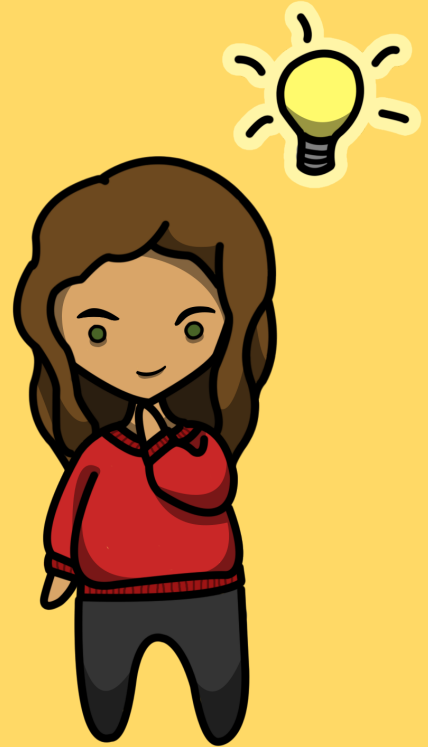


Personas Are Not About
Opinion, Hearsay, Or Biases

They Are **Grounded In Evidence**

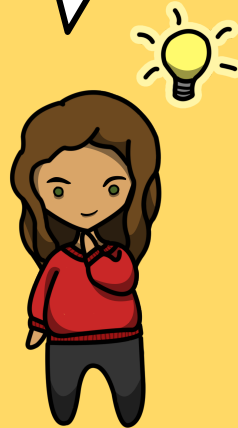


With this in mind, we should be aware of some of the **Biases** that might get in our way of creating evidenced-based Personas



CONFIRMATION BIAS
STEREOTYPING
RECENCY BIAS
CULTURAL BIAS
SELECTION BIAS
ANCHOR BIAS
GROUPTHINK
OVER-RELIANCE ON QUANTITATIVE DATA
EGO-CENTRIC BIAS

SOME
BIASES
THAT MIGHT
AFFECT
YOUR
PERSONAS



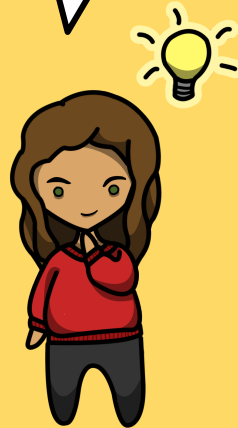
CONFIRMATION BIAS

STEREOTYPING
RECENCY BIAS
CULTURAL BIAS
SELECTION BIAS
ANCHOR BIAS
GROUPTHINK
OVER-RELIANCE
ON QUANTITATIVE
DATA
EGO-CENTRIC
BIAS

The tendency to search for, interpret, favour, and recall information in a way that confirms one's **preexisting beliefs or hypotheses**.

Designers might give more weight to data that supports their initial ideas about a persona and ignore data that contradicts it.

SOME
BIASES
THAT MIGHT
AFFECT
YOUR
PERSONAS

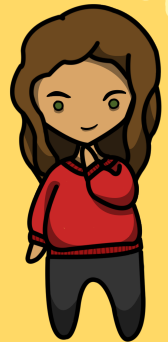


CONFIRMATION
BIAS
STEREOTYPING
RECENCY BIAS
CULTURAL BIAS
SELECTION BIAS
ANCHOR BIAS
GROUPTHINK
OVER-RELIANCE
ON QUANTITATIVE
DATA
EGO-CENTRIC
BIAS

This involves creating an **oversimplified image of a typical user** based on generalizations about age, gender, race, or socio-economic status.

Such stereotypes can lead to personas that do not accurately represent the diversity of the user base.

SOME
BIASES
THAT MIGHT
AFFECT
YOUR
PERSONAS



CONFIRMATION
BIAS
STEREOTYPING
RECENCY BIAS
CULTURAL BIAS
SELECTION BIAS
ANCHOR BIAS
GROUPTHINK
OVER-RELIANCE
ON QUANTITATIVE
DATA
EGO-CENTRIC
BIAS

Overemphasizing data or experiences that are
most recent.

Designers might unintentionally give more
importance to the latest user feedback or
trends, disregarding earlier, equally relevant
information.

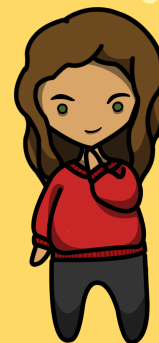
SOME
BIASES
THAT MIGHT
AFFECT
YOUR
PERSONAS



CONFIRMATION
BIAS
STEREOTYPING
RECENCY BIAS
CULTURAL BIAS
SELECTION BIAS
ANCHOR BIAS
GROUPTHINK
OVER-RELIANCE
ON QUANTITATIVE
DATA
EGO-CENTRIC
BIAS

If the design team is not diverse, there might be a natural inclination towards creating personas that reflect their **own cultural backgrounds** and experiences, potentially overlooking the needs and preferences of users from different cultural backgrounds.

SOME
BIASES
THAT MIGHT
AFFECT
YOUR
PERSONAS

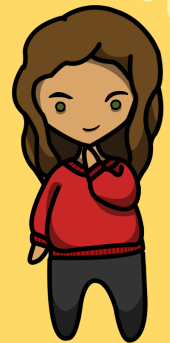


CONFIRMATION
BIAS
STEREOTYPING
RECENCY BIAS
CULTURAL BIAS
SELECTION BIAS
ANCHOR BIAS
GROUPTHINK
OVER-RELIANCE
ON QUANTITATIVE
DATA
EGO-CENTRIC
BIAS

This occurs when the method for selecting data or user feedback is **not randomized** or representative.

Selection bias can lead to developing personas based on an unrepresentative sample of the user population.

SOME
BIASES
THAT MIGHT
AFFECT
YOUR
PERSONAS

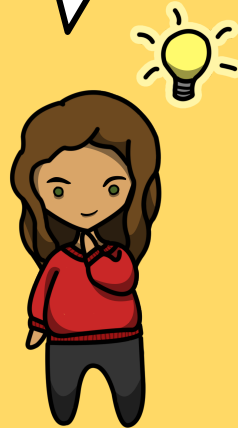


CONFIRMATION
BIAS
STEREOTYPING
RECENCY BIAS
CULTURAL BIAS
SELECTION BIAS
ANCHOR BIAS
GROUPTHINK
OVER-RELIANCE
ON QUANTITATIVE
DATA
EGO-CENTRIC
BIAS

The tendency to rely too heavily on the **first piece of information** seen (the "anchor") when making decisions.

Early research or opinions can disproportionately shape the final persona.

SOME
BIASES
THAT MIGHT
AFFECT
YOUR
PERSONAS

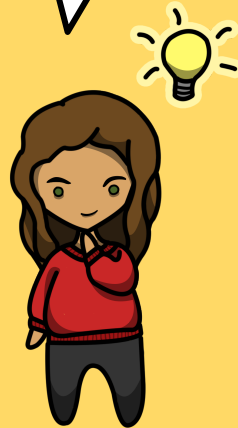


CONFIRMATION
BIAS
STEREOTYPING
RECENCY BIAS
CULTURAL BIAS
SELECTION BIAS
ANCHOR BIAS
GROUPTHINK
OVER-RELIANCE
ON QUANTITATIVE
DATA
EGO-CENTRIC
BIAS

In team settings, the desire for harmony or conformity might result in an irrational or dysfunctional decision-making outcome.

Teams might agree on a persona that is not contentious rather than one that is most accurate.

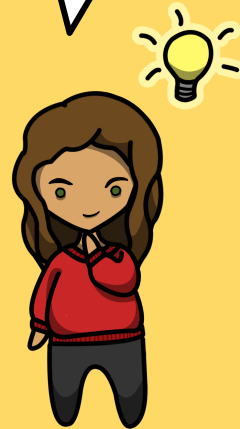
SOME
BIASES
THAT MIGHT
AFFECT
YOUR
PERSONAS



CONFIRMATION
BIAS
STEREOTYPING
RECENCY BIAS
CULTURAL BIAS
SELECTION BIAS
ANCHOR BIAS
GROUPTHINK
**OVER-RELIANCE
ON QUANTITATIVE
DATA**
EGO-CENTRIC
BIAS

Focusing too much on quantitative data (like statistics and metrics) can lead to **overlooking qualitative insights** (like emotions and experiences) which are equally important in persona development.

SOME
BIASES
THAT MIGHT
AFFECT
YOUR
PERSONAS



CONFIRMATION
BIAS
STEREOTYPING
RECENCY BIAS
CULTURAL BIAS
SELECTION BIAS
ANCHOR BIAS
GROUPTHINK
OVER-RELIANCE
ON QUANTITATIVE
DATA
**EGO-CENTRIC
BIAS**

Designers might unintentionally project their **own preferences and behaviours** onto the persona, assuming that users will interact with the interface in the same way they do.

SOME
BIASES
THAT MIGHT
AFFECT
YOUR
PERSONAS



To Avoid These (And Other Biases):

- Have A Diverse Team
- Use Both Qualitative & Quantitative Methods
- Seek Broad Range Of Feedback
- Be Aware Of Biases

