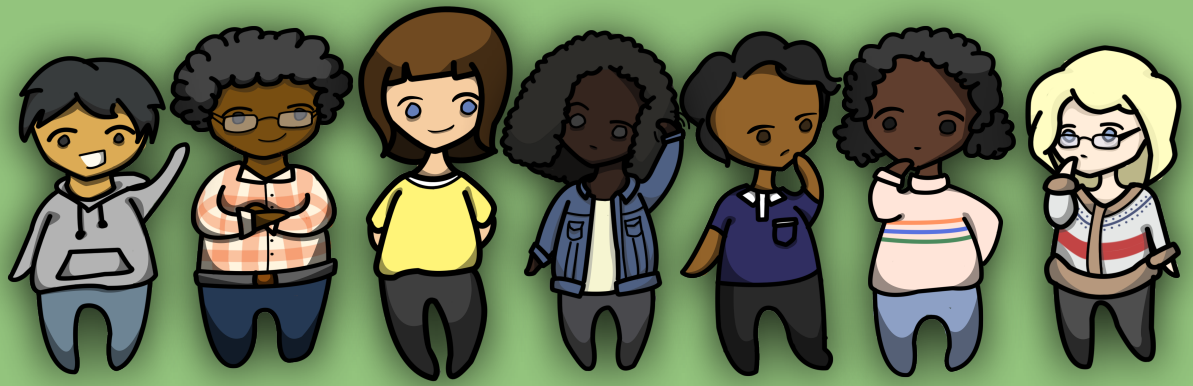
CIS2170 USER INTERFACE DESIGN
UNDERSTANDING USERS & CONTEXT PART II



WEEK 3 CLASS 2

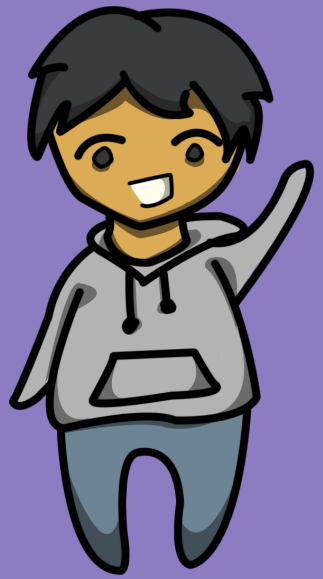
Slides by Dr. Gillis and Dr. Zhao
Artwork by Lilian Shi

IN TODAY’S CLASS:

- OVERVIEW - TOOLS FOR USER CENTRED DESIGN
- PERSONAS

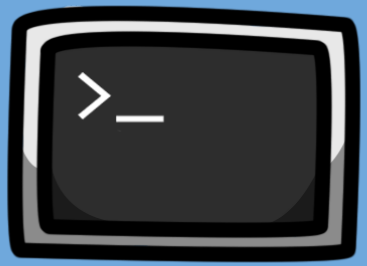
Menti

RECALL!



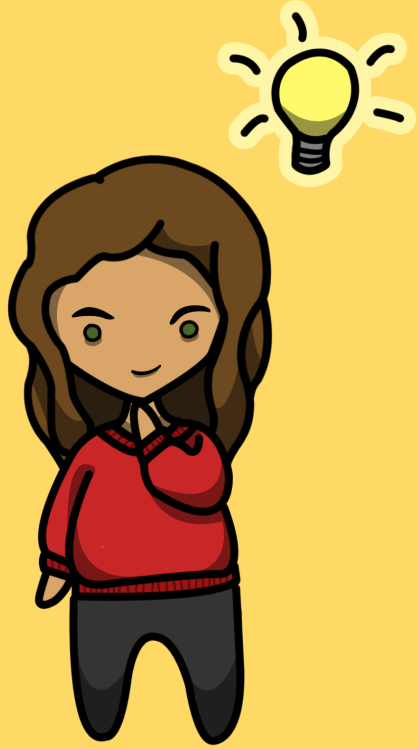
FOUR ESSENTIAL ELEMENTS OF USER-CENTRED DESIGN

- VISIBILITY
- ACCESSIBILITY
- LEGIBILITY
- LANGUAGE



TOOLS FOR USER CENTRED DESIGN

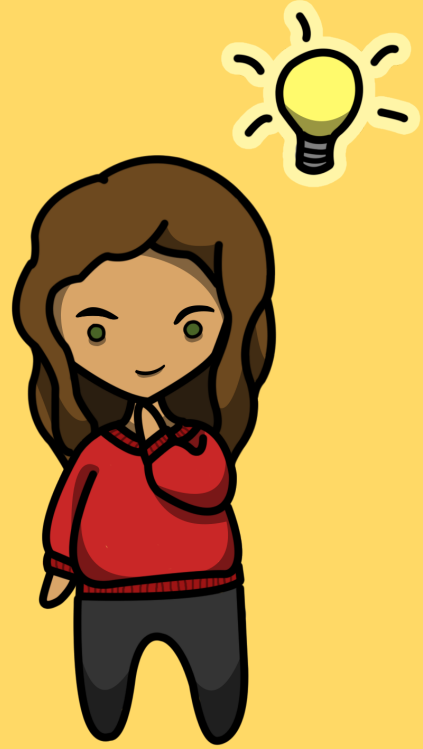
There Are Several Different “Tools”
That We Can Use When We Are Approaching
Design From A User-Centred Perspective



These Include:

Personas
Scenarios
Use Cases

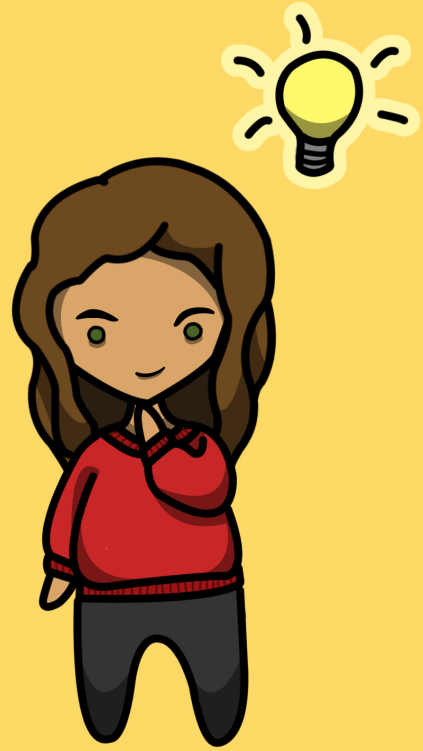
And We'll Touch On Each Of These
Over The Next Few Classes

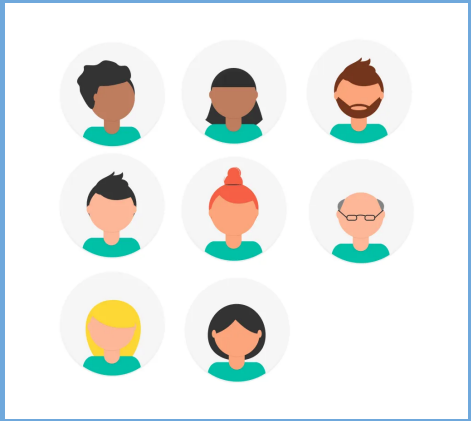


Personas - fictional characters informed by evidence

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



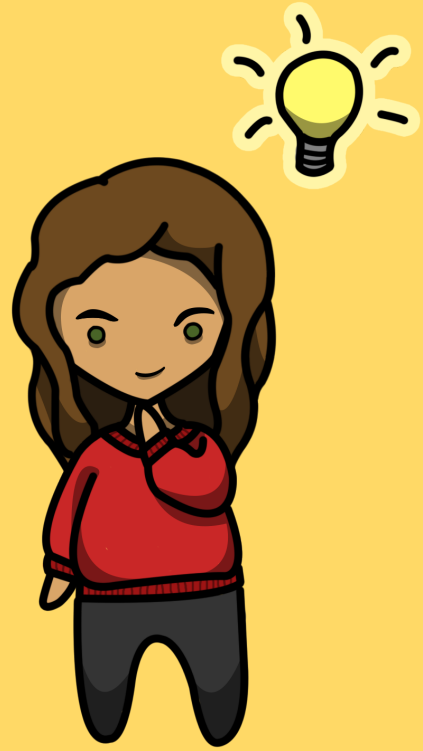


PERSONAS

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

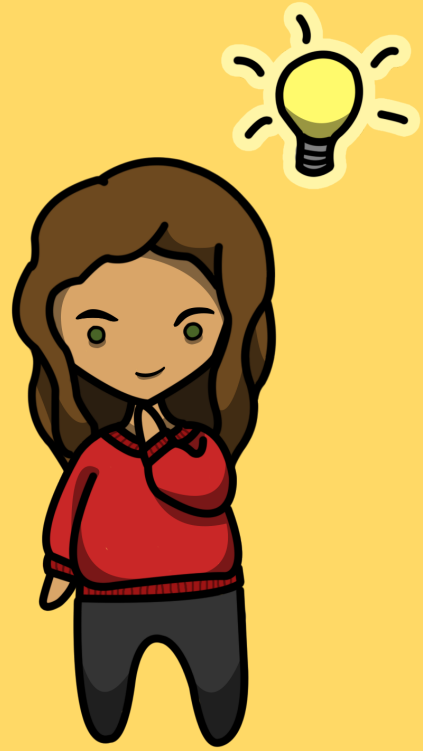
Personas

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

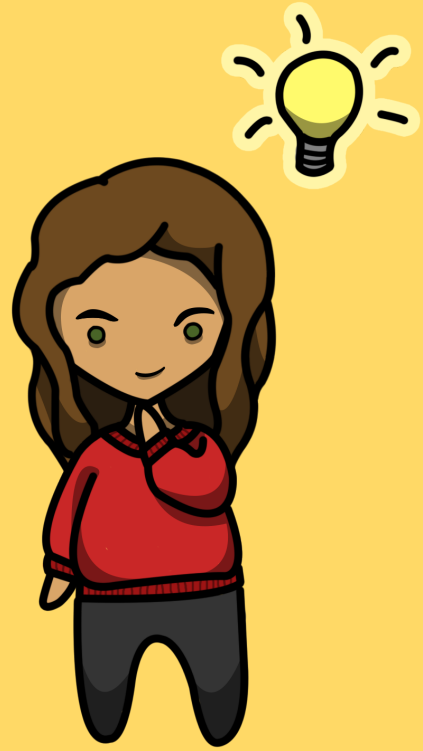


- They Are Given Names, Pictures, Demographics, Roles, Tasks, Job Descriptions, Behaviours, Goals, Motivations

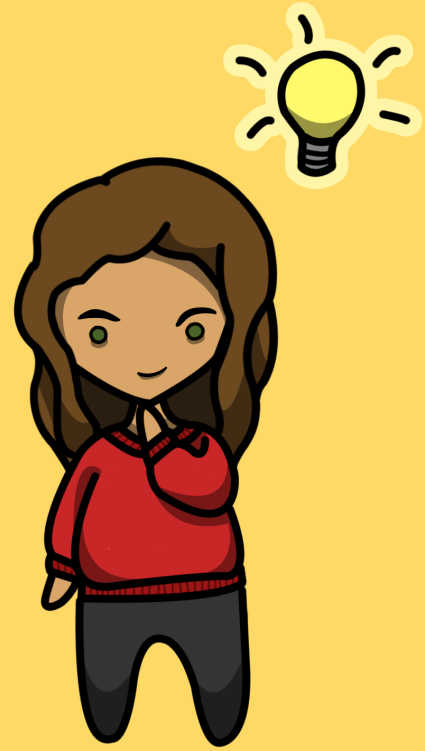
- Their Pain Points Or Challenges Are Described



- 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

BEHAVIORAL IDENTIFIERS

JUSTIN, 31

DEMOGRAPHICS

BEHAVIORAL IDENTIFIERS

MAGGIE, 52

DEMOGRAPHICS

BEHAVIORAL IDENTIFIERS

Assaf

About

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

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.

Why he get to the market ?

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.

"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

Pain Points

Have a hard time to find a resturant 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

EMPATHY BUILDING

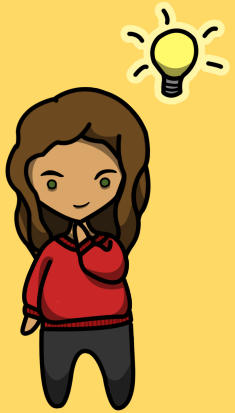
GUIDED DECISION MAKING

ENHANCED COMMUNICATION

FOCUS ON USER NEEDS

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

WHY DO WE USE PERSONAS?



EMPATHY BUILDING

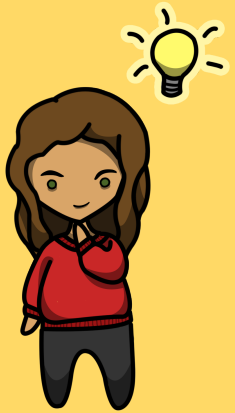
GUIDED DECISION MAKING

ENHANCED COMMUNICATION

FOCUS ON USER NEEDS

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

WHY DO WE USE PERSONAS?



EMPATHY BUILDING

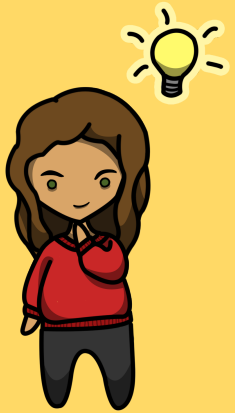
GUIDED DECISION MAKING

ENHANCED COMMUNICATION

FOCUS ON USER NEEDS

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

WHY DO WE USE PERSONAS?



EMPATHY BUILDING

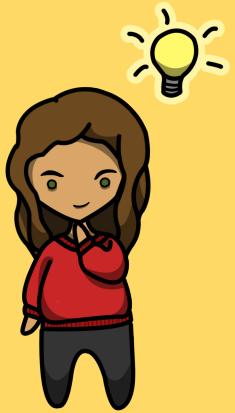
GUIDED DECISION MAKING

ENHANCED COMMUNICATION

FOCUS ON USER NEEDS

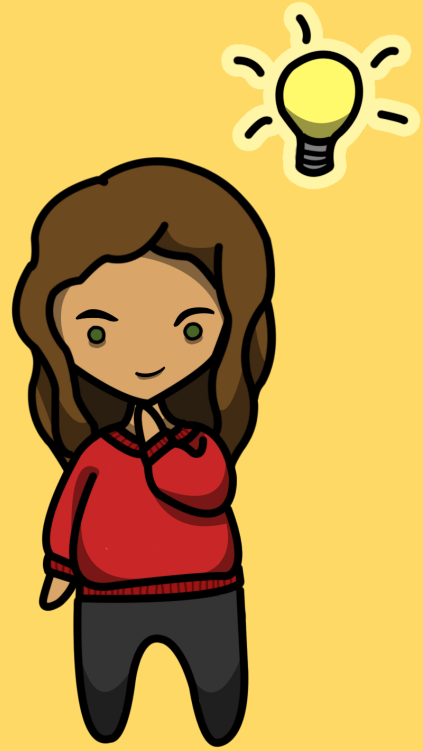
Personas Keep Focus On User Needs Throughout The Design Process

WHY DO WE USE PERSONAS?

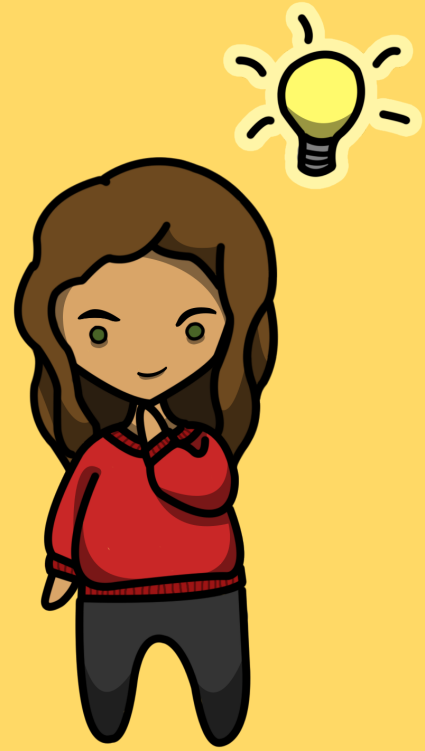


There Are Many Types Of Personas

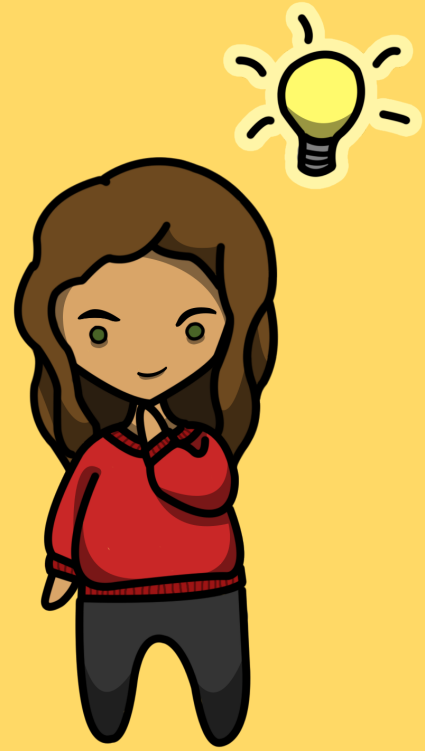
- Primary — the main targets of experience design (can be more than one)
- Secondary — mostly satisfied with the requirements of the primary personas, but not entirely.
- Customer —buyer group
- Served — not users of the product but are directly affected by the use of the product
- Negative — users that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



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

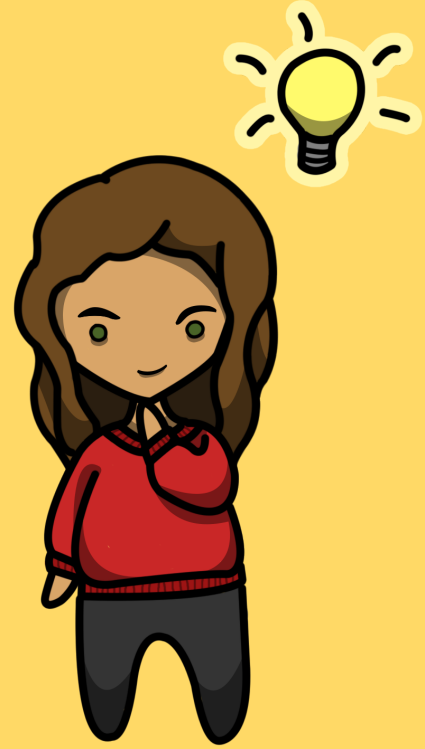


Since This Is A Redesign, And We Have Some Experience With WebAdvisor, We'll Start By Asking The Question - **Who Uses WebAdvisor**?



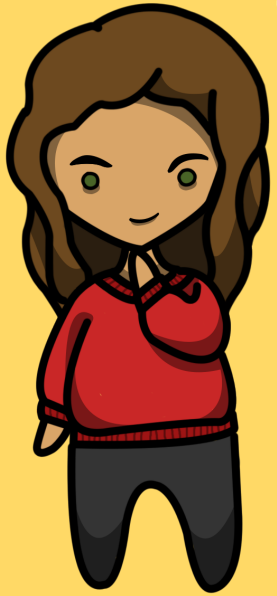
To Do This, We Can Search For Evidence That We Might Use To Inform Our Personas

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



Things you want to know about your user

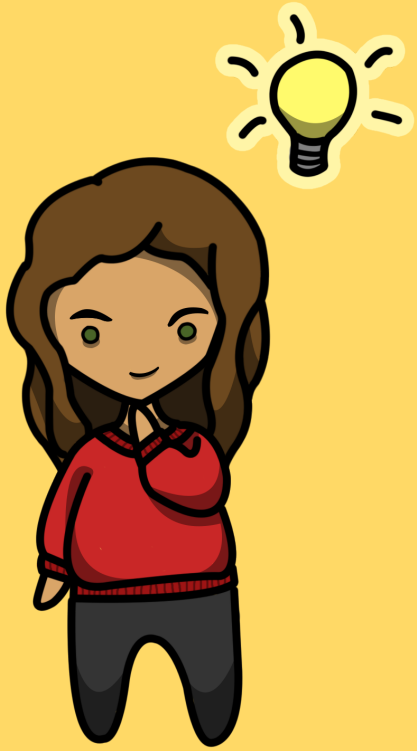
Consider creating a table that we populate with evidence (links and short summaries)



	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			

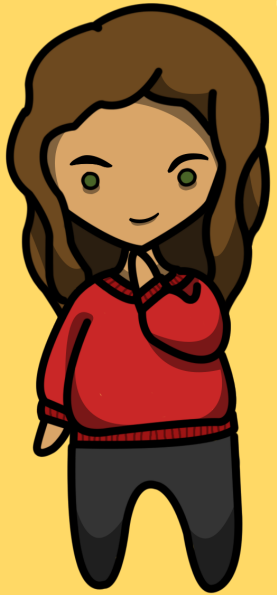
Consider creating a table that we populate with evidence (links and short summaries)

Persona Types



	Primary (Students, Planning & Registration Staff)	Secondary (Professors)	ks,
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)	ors, 79% ed faculty... (2021)	
Goals			
Current Solutions/Pain Points			

Evidence

	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

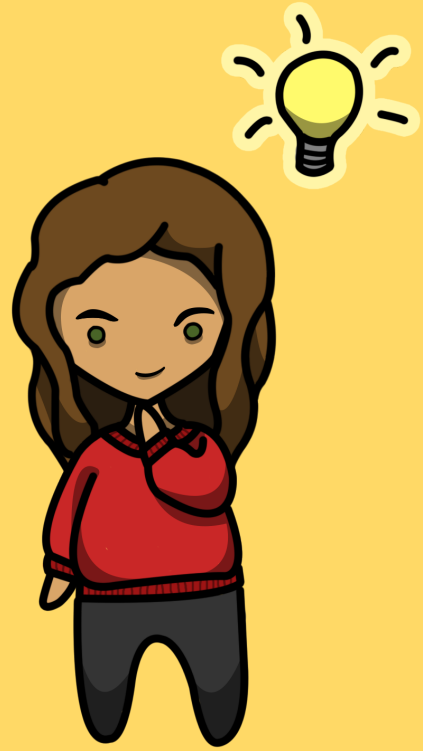
Gaps that can be filled with the methods discussed in lecture 5

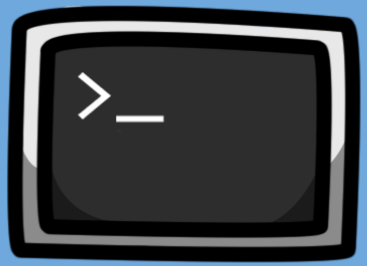
	Primary (Students, Planning & Registration Staff)	Secondary (Professors)	Negative (Non UofG folks, Alumni)
Demographics	60% women, 22594/26152 FT undergrads, 2910/3138 FT grads, 4.7% and 19.7% international undergrad/ grad respectively, 92.2%/70.9% from Ontario (undergrad/grad)... (2021)	836 faculty 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

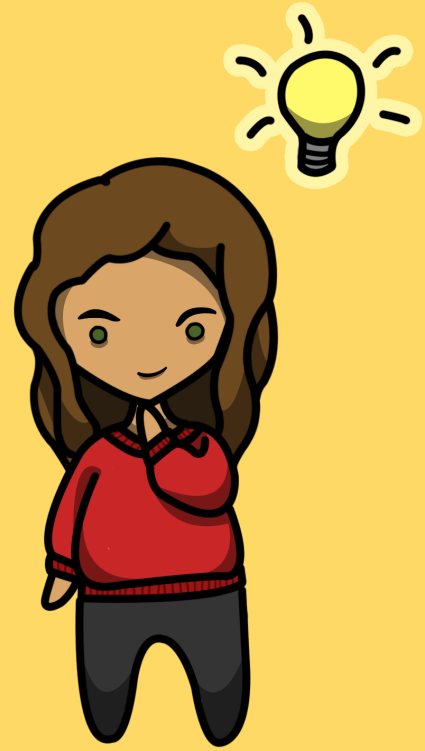




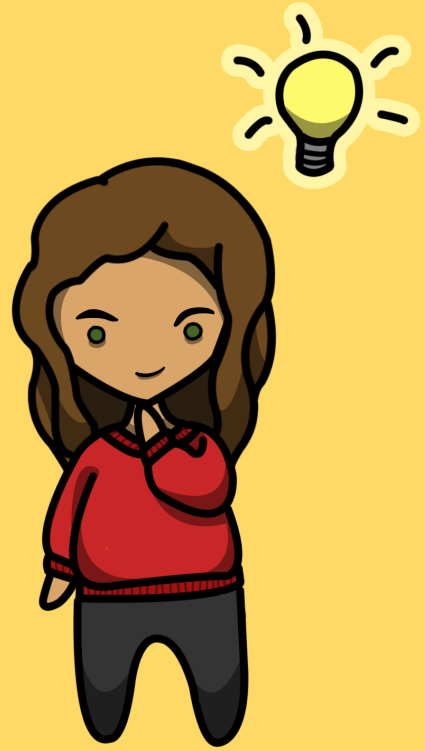
BIAS

Consider The Following:

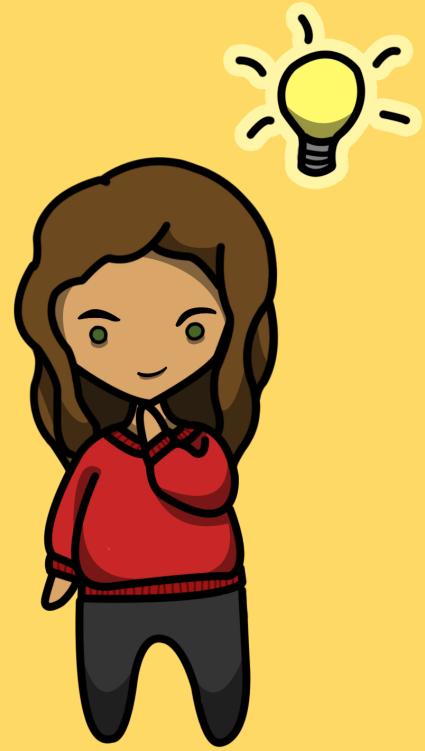
You Have Been Hired To Design A Dinner Menu For Valentine’s Day Weekend For A Local Pub



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

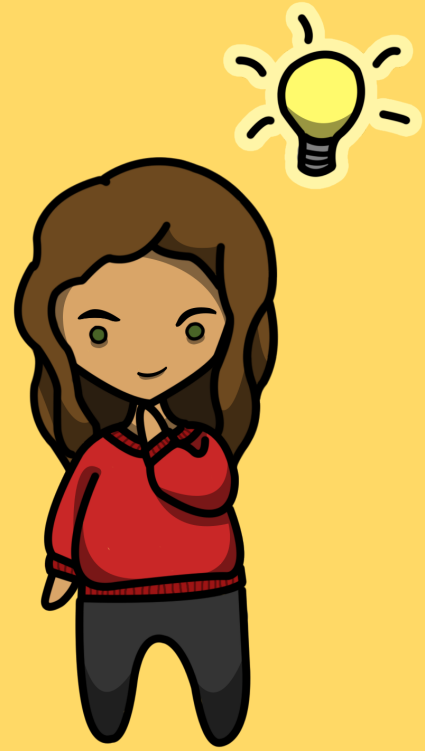


Let’s Consider **Who Wouldn’t Go To The Restaurant** - That Is, Let’s Describe The **Negative Persona**

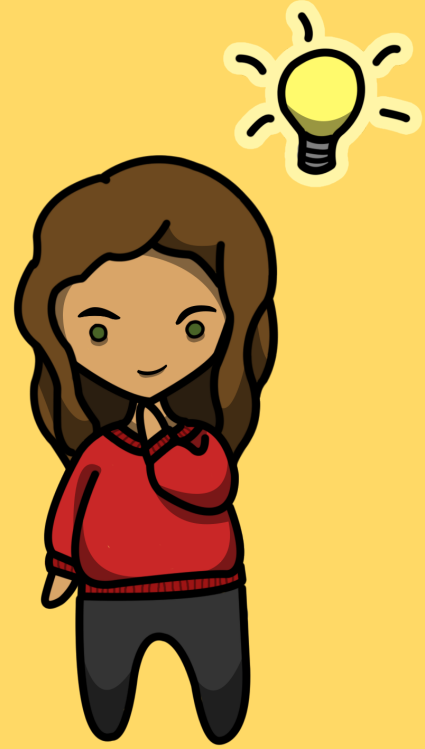


Get Into Small Groups

Write A Short Paragraph About The Negative Persona

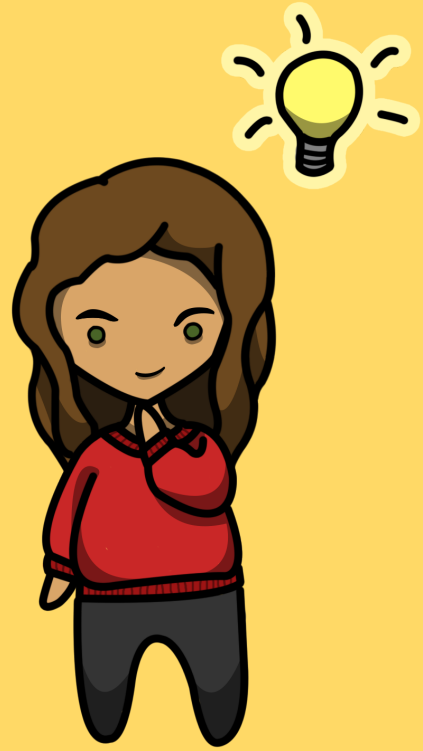


What Evidence Do You Have To Support Your Personas?

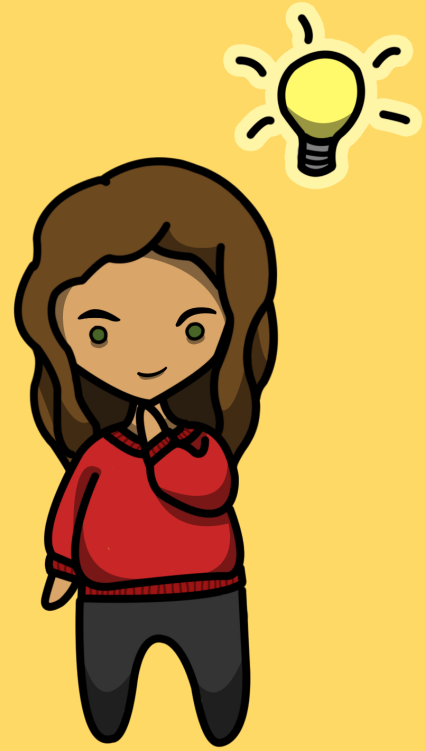


Personas Are Not About
Opinion, Hearsay, Or Biases

They Are **Grounded In Evidence**

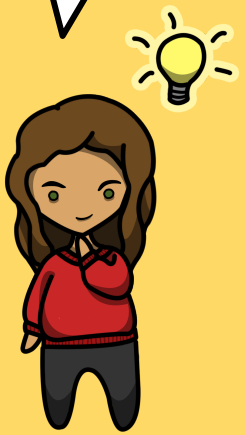


With this in mind, we should be aware of some of the **Biases** that might get in our way of creating evidenced-based Personas



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

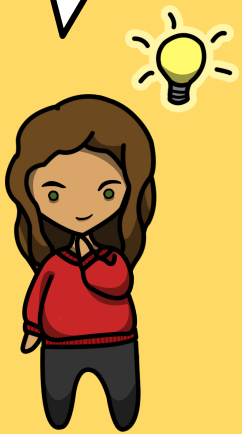


SOME BIASES THAT MIGHT AFFECT YOUR PERSONAS

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.

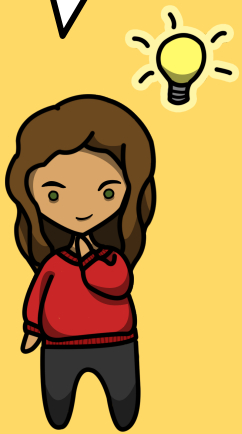


SOME BIASES THAT MIGHT AFFECT YOUR PERSONAS

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.

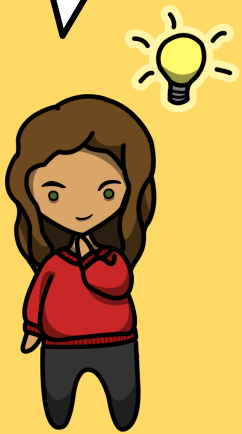


SOME BIASES THAT MIGHT AFFECT YOUR PERSONAS

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**.

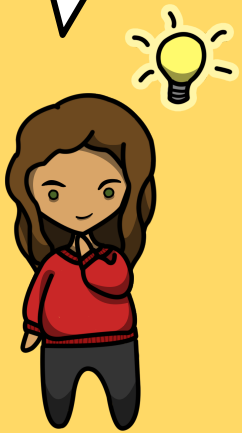
Designers might unintentionally give more importance to the latest user feedback or trends, disregarding earlier, equally relevant information.



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.

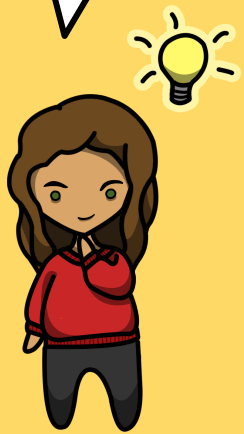


SOME BIASES THAT MIGHT AFFECT YOUR PERSONAS

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.

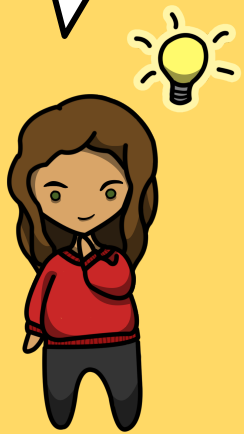


SOME BIASES THAT MIGHT AFFECT YOUR PERSONAS

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.

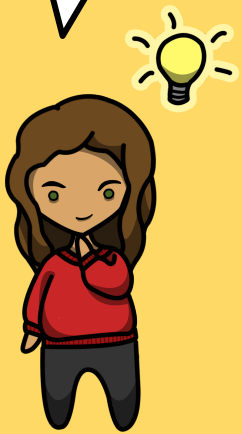


SOME BIASES THAT MIGHT AFFECT YOUR PERSONAS

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.

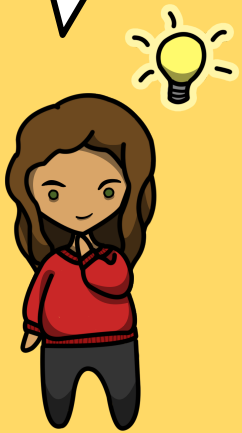
Teams might agree on a persona that is not contentious rather than one that is most accurate.



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

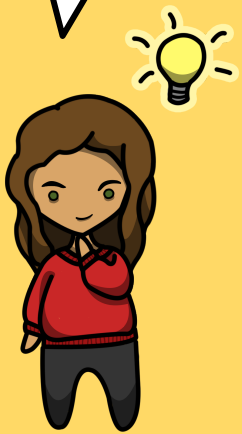
Focusing too much on quantitative data (like statistics and metrics) can lead to **overlooking qualitative insights** (like emotions and experiences) which are equally important in persona development.

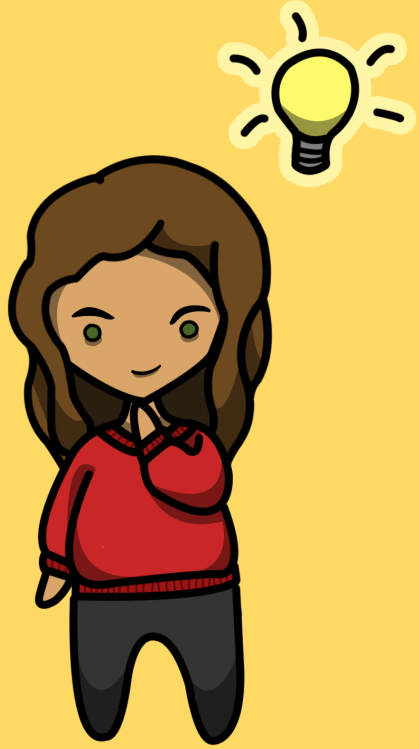


SOME BIASES THAT MIGHT AFFECT YOUR PERSONAS

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.



To Avoid These (And Other Biases):

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