Your name:

_____

Welcome to the beginning of Activity 2

Indicate the time right now (hh:mm):

_____

GREatBus Project

GREatBus proposes an intelligent system for passengers and bus drivers. Overall, the project aims to facilitate bus-related tasks. For the driver it is important for example to know if the people who are at the stop will take the bus. For the passenger it is important to know estimates, bus capacity, among others.

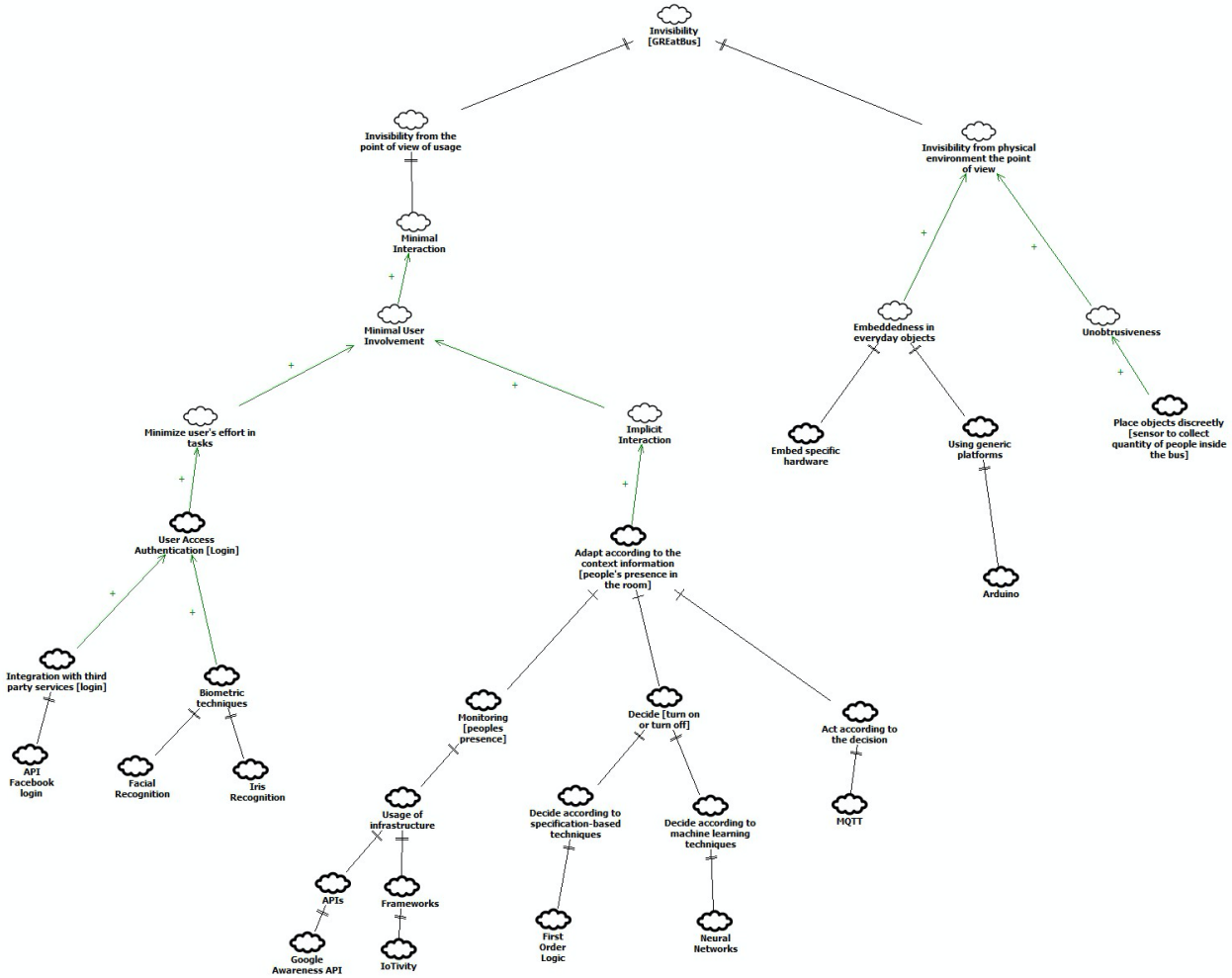
The **functional requirements** of this application are:

- The system must be able to receive or request information about the number of bus requests per stop
- The system shall be able to calculate the estimated bus arrival time based on the distance from the bus to the user and the speed of the vehicle
- The system must be able to inform the capacity of the bus
- The system must be able to indicate that at that location there is a passenger requesting the bus.

The **non-functional requirements** of this application are:

- Invisibility: refers to merging technology into the user's physical environment or decreasing the interaction workload
- Privacy: the state or condition of being free to be observed or disturbed
- Accessibility: the degree to which a product or system can be used by people with the widest range of features and capabilities to achieve a specified goal in a specified context of use

Invisibility for GREatBus.



Description of Operationalizing Softgoals

Operationalizing Softgoals	Definition
API Facebook Login	API that allows authentication with Facebook data
Facial Recognition	Technique to identify the user based on their face
Iris Recognition	Technique to identify the user based on their iris
Google Awareness API	Unify 7 location and context signals in a single API, allowing developers to create context-based functionality with minimal impact on system resources.
IoTivity	Open source framework that enables device to device connectivity to meet emerging IoT needs
First order logic	Mathematical logic used to specify system states and operators / functions to apply to those states. They provide reasoning support to identify complex contexts and situations
Neural Network	Technique that presents a mathematical model inspired by the neural structure of intelligent organisms that gain knowledge through experience
MQTT	Machine-to-machine (M2M) / “IoT” connectivity protocol. Designed as a publish/subscribe message transport
Embedded hardware	Acting and sensing specific embedded hardware on objects
Arduino	Open source electronic platform based on hardware and software
Place objects discreetly	If hardware devices cannot be fully hidden, they must be discreetly placed in the physical area. Therefore, places where the user does not need to perform actions such as wall and roof corners are ideal

Task 1: For each operationalizing softgoal in the last SIG level, check if there is a positive or negative impact to Privacy and Accessibility. After that, make an analysis of which operationalizing softgoal maximize the positive impacts and minimize the negative impacts for all the NFRs mentioned above. You can use this space below as a draft for your analysis.

Correlation Catalog

Strategy	Type	Quality Characteristic
Facebook Log-in	HELPS	Efficiency
Facebook Log-in	HURTS	Privacy
Facebook Log-in	HURTS	Security / Confidentiality
Facial Recognition	HELPS	Usability / Accessibility
Facial Recognition	HURTS	Functional Suitability / Functional Correctness
Facial Recognition	HURTS	Privacy
Facial Recognition	HURTS	Performance Efficiency / Time Behavior
Facial Recognition	HURTS	Efficiency
Facial Recognition	HURTS	Security / Authenticity
Iris Recognition	HELPS	Security
Iris Recognition	HELPS	Usability/Accessibility
Iris Recognition	HURTS	Performance Efficiency / Time Behavior
Iris Recognition	HURTS	Efficiency
Awareness	HELPS	Functional Suitability
Awareness	HURTS	Privacy
IoTivity	HELPS	Functional Suitability
First order logic	HURTS	Performance Efficiency
Neural Network	HELPS	Efficiency
Neural Network	HELPS	Performance Efficiency
Neural Network	HELPS	Context Coverage / Flexibility
Neural Network	HURTS	Usability / Learnability
MQTT	HELPS	Performance Efficiency
Embedded hardware	HELPS	Reliability
Place objets discret	HELPS	Satisfaction
Place objets discret	HURTS	Usability / Operability
Arduino	HURTS	Reliability
Arduino	HURTS	Performance efficiency / capacity

Task 2: Based on the analysis made above, specify below which operationalizing softgoals you would choose for the GREatBus project.

End of Activity 2

Indicate the time right now (hh:mm):

_____

Post Task Form

1. I identified the impacts **easily**

Strongly disagree	Partially disagree	I do not agree nor disagree	Partially agree	I totally agree

2. I identified the impacts ***quickly***

Strongly disagree	Partially disagree	I do not agree nor disagree	Partially agree	I totally agree

3. I made a decision about the operationalizing softgoals **easily**

Strongly disagree	Partially disagree	I do not agree nor disagree	Partially agree	I totally agree

4. I made a decision about the operationalizing softgoals **quickly**

Strongly disagree	Partially disagree	I do not agree nor disagree	Partially agree	I totally agree

5. Did you keep the way of deciding the operationalizing softgoals of the previous activity (e.g what decision criteria did you use)? If not, how did you decide?

6. I think that the catalog / document made my decision easier.

Strongly disagree	Partially disagree	I do not agree nor disagree	Partially agree	I totally agree

7. Why?

8. I recommend the usage of the catalog.

Strongly disagree	Partially disagree	I do not agree nor disagree	Partially agree	I totally agree

9. Why?
