What is an Autonomous Taxi

# Discussion Questions

What is an autonomous vehicle?

An autonomous vehicle, referred to as a self-driving or driverless car, is a type of vehicle capable of functioning without human intervention or aid. These vehicles rely on a combination of sensors, cameras, and computer algorithms to detect their environment and autonomously navigate roads, eliminating the necessity for a human driver to operate them..

What would an autonomous taxi look like?

An autonomous taxi is expected to have a sleek and contemporary design that emphasizes passenger comfort and safety. The vehicle's exterior may feature a futuristic appearance with smooth contours and vibrant colors. Equipped with advanced sensors, cameras, and technologies, the autonomous taxi can navigate roads and transport passengers safely without human intervention.

Internally, the autonomous taxi offers a spacious and cozy cabin with comfortable seating and amenities like climate control, entertainment systems, and Wi-Fi connectivity. Passengers may find a large screen or interface within the cabin that allows them to input their destination and access information about the ride.

Overall, the primary objective of an autonomous taxi's design is to ensure a seamless and pleasant transportation experience for passengers. The incorporation of cutting-edge autonomous technology further enhances safety and efficiency during the journey.

How does an autonomous taxi’s work?

An autonomous taxi operates by employing an array of sensors, cameras, and computer algorithms to perceive the environment and maneuver on roads autonomously. The following are the general steps involved in the functioning of an autonomous taxi:

1. Vision: Through the use of lidar, radar, and cameras, the autonomous taxi perceives its surroundings, detecting other vehicles, pedestrians, and obstacles.
2. Location: Utilizing GPS and similar technologies, the taxi determines its precise location on the road and maps out the most suitable route.
3. Planning: The autonomous system plans the taxi's route, considering factors such as traffic, road conditions, and the desired destination of the passenger.
4. Control: The system assumes control over the vehicle's acceleration, braking, and steering, enabling it to navigate the designated route while avoiding any obstacles.
5. Interaction: An interface, like a touch screen, allows passengers to interact with the autonomous taxi. They can input their desired destination and track the vehicle's progress.
6. Safety: The autonomous system continuously monitors the taxi's surroundings, ensuring safe operation and actively preventing collisions or other potential hazards.

In summary, an autonomous taxi relies on advanced technologies to offer passengers a seamless and secure transportation experience, all without requiring human intervention in operating the vehicle.

## Literacy component review the attached article

<https://www.forbes.com/sites/enriquedans/2021/06/11/the-future-of-autonomous-vehicles-product-orservice/?sh=7ee2c4fc5892>

Or file

<https://drive.google.com/file/d/1eiHdNC177ldpNAD7VVtm_pmtBrKjUno0/view?usp=share_link>

Answer the following questions after reading the article:

1. -What are some of the challenges that must be addressed before autonomous vehicles can achieve widespread adoption, as stated in the article?
2. -As per the article, what is the current state of autonomous vehicle technology, and what advancements can be expected soon?
3. -In terms of convenience and safety, what are some potential benefits of autonomous vehicles, as mentioned in the article?
4. -How could the introduction of autonomous vehicles potentially impact the design of cities and people's lifestyles and work patterns, according to the article?
5. -What ethical and legal considerations should be considered during the development and implementation of autonomous vehicles, as discussed in the article?