

## REPORT ON PlantTree-AR-App

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### Use Case:

The PlantATree-AR App is an augmented reality (AR) application developed using ARCore technology. The primary purpose of the app is to allow users to virtually plant different types of trees on surfaces in the real world. The available tree options include Coffee, Palm, Pine Tree, Banana Tree, and Ivory. Users can select their desired tree type and view it in augmented reality.

### Functionalities:

- ✓ **Tree Selection:** Users can choose from a variety of tree types, such as Coffee, Palm, Pine Tree, Banana Tree, and Ivory.
- ✓ **AR Planting:** The app utilizes ARCore to anchor and display the selected tree on surfaces in the real world, providing users with an immersive experience.
- ✓ **Realistic Rendering:** The app aims to render the virtual trees in a realistic manner, enhancing the user's visual experience.
- ✓ **Interactive Interface:** The user interface allows for intuitive tree selection and placement, making it user-friendly.
- ✓ **Educational Value:** The app includes educational information about each type of tree, providing users with insights into the characteristics and significance of different plant species.

### Limitations:

- **Device Compatibility:** The app have limitations based on the devices that support ARCore, potentially excluding users with incompatible devices. It Only Supports with >=Android 11 Versions.
- **Environmental Conditions:** AR functionality can be affected by environmental conditions, such as poor lighting or lack of distinct surfaces, which may impact the user experience.
- **Limited Tree Types:** While the app offers a variety of tree options, the selection might be limited compared to the vast diversity of real-world plant species.
- **Data Accuracy:** Information provided about each tree may be limited, and the app may not provide comprehensive details about the selected plants.