

# Phone Development

The development of the phone interface as an auxiliary controller in our desktop game leverages innovative technology and design principles to enhance user immersion. This section details the approach taken in using Vue.js for interface design, navigation, and the dynamic handling of various minigames through the phone.

## 1. Vue Used for Page Design & Navigation

For the interface design and navigation on the phone, we employed Vue.js, a progressive JavaScript framework known for its adaptability and component-based architecture. Vue.js facilitated the creation of a dynamic and responsive user interface, simulating the familiar environment of a phone's homepage and its various applications. By utilizing Vue components, we were able to modularize the UI, making it scalable and maintainable, with each component representing different apps or functionalities required for the minigames.

Navigation between these components was managed using Vue Router, enabling seamless transitions and simulating the natural experience of using a smartphone. This setup ensured that players could intuitively interact with the phone's interface, switching between apps as they would on their own device, thereby maintaining a high level of engagement with the desktop game.

## 2. Minigames Interaction

The integration of minigames played through the phone as a controller is a cornerstone of our game's immersive experience. Each minigame is thoughtfully designed to be unique, demanding varied interactions and inputs from the user's phone, effectively transforming it into an extension of the game environment. This diversification is achieved by incorporating familiar smartphone applications such as a photo gallery, web browser, and messaging app into the gameplay, enriching the interactive landscape.

Within the phone interface, applications akin to those found on a standard smartphone serve as gateways to different minigames. For instance, selecting the photo app might let you have a peek through the character's privacy and keep finding more secrets, while the browser app could lead players on a digital scavenger hunt through web

pages simulated within the game. The messaging app, on the other hand, might be used for deciphering codes or communicating with game characters.

This approach not only capitalizes on the intuitive familiarity users have with their smartphones but also introduces a layer of depth to the gameplay. By navigating through these app-like interfaces to engage with minigames, players experience a blend of reality and virtual gaming, enhancing immersion. Each interaction within these applications is designed to contribute directly to the progress within the desktop game, seamlessly integrating smartphone gestures and actions as game inputs.

The dynamic nature of these minigames, combined with the versatile input methods offered by modern smartphones—such as touch, swipe, and tilt—enables a rich and varied gaming experience. This innovative use of everyday technology challenges traditional gaming paradigms and opens up new avenues for game design and player engagement.

### 3. Activation & Communication

The transition into a minigame mode is initiated by the desktop game, which sends a signal to the phone via a specialized connection API. This API is crucial for the real-time communication between the phone and the desktop, allowing them to exchange messages and synchronize actions. Upon receiving a minigame activation signal, the phone's Vue application updates its state to display the relevant UI for the minigame, providing users with the necessary controls and information to interact with the game on the desktop.