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Experience and Interaction

Signifiers, Mapping, Affordances

Link to app prototype: https://xd.adobe.com/view/fe81dce5-e94b-49aa-9383-ca1e55b7deda-abd2/

Signifiers

Icons:

- There is one instance of an icon in the app prototype. That is the home button on the screen "Congrats, you have found banana." The home button directly resembles a home, which indicates the home page.

Symbols:

- There are several instances of symbols throughout the app prototype:
 - The triangle shaped "play" button on the home screen is an example of a symbol. The symbol has no physical resemblance to "play," but has affordances in the sense that the arrow is pointing right, and right is generally seen as a "forward" direction -the direction in which the game is moving.
 - The square shaped "stop" button on the game screens is an example of a symbol. The symbol has
 no physical resemblance to "stop" but has affordances in the sense that there is no specific
 direction in a square. Thus, the game is "stopped."
 - The parallel lines "pause" button on the game screens is an example of a symbol. The symbol has
 no physical resemblance to "pause" but has affordances in the sense that the lines are parallel
 and never touch, thus it is stopped. Another way of looking at this is one is between two frames.
 - The up and down arrow buttons on the game screens are examples of symbols. The symbol has
 no physical resemblance to the motions of up and down but has affordances. The directions the
 arrows point to indicate the direction of motion.
 - The "play again" button on the screen, "Congrats, you have found banana" is an example of a symbol. The symbol has no physical resemblance to the action of playing again. However, there are affordances in the sense that the symbol is almost a circle, and the arrow shows the flow of direction. "It comes full circle," in the sense that the user wants to replay the game.

Index:

- There are several instances of indices throughout the app prototype:
 - The hover over in the title on the home screen "help monkey find his banana" is an example of an index.

 On the screen with a fire with an x over is – the fire with an x over it is an example of an index because it shows the outcome of the monkey running into the fireball.

Affordances:

Perceived:

- There are several instances of perceived affordances in this app prototype that lie in cultural affordances
 - The play symbol on the home screen has the perceived affordance that it will start the game. The perception is based on the cultural norms that the triangle play button indicates the direction is moving forward. This is apparent in several technologies such as VCR's and Video Cameras. The user perceives the information through such. The user perceives that this symbol will start the game
 - The square stop symbol has the perceived affordance through cultural norms that the square button means "stop." This is apparent in several technologies such as VCR's and Video Cameras.
 The user perceives the information through such. The user perceives that this symbol will stop the game
 - The parallel lined pause symbol has the perceived affordance through cultural norms that the lined button means "pause." The two lines indicate in between frames - This is apparent in several technologies such as VCR's and Video Cameras. The user perceives the information through such. The user perceives that this symbol will pause the game.
 - The up and down arrowed symbols have the perceived affordance through cultural norms that the monkey will move in the direction that the arrow is pointing towards. We point in the direction of objects we are indicating, and it is innate human nature for the user to perceive information through such. The user perceives that the monkey will move in the direction of the arrow symbols.
 - The circles replay symbol has the perceived affordance through cultural norms that this button means that the game will restart. The full circle represents back to the start, and the arrow points in that direction. The user perceives that this symbol will restart the game. This is seen on several VCR technologies to replay a tape.
 - The home symbol has the perceived affordance through cultural norms that this button will bring the user back to the home screen. Home is a term that is used to describe something familiar and unchallenging (a place of relaxation), and the home screen does just that (no game screens). The home button is used on several technologies to make this a innate part of human cognition and perception.
 - The fireballs are images that have the perceived affordance of being dangerous. Fire is seen as
 dangerous and will cause injury and burn. Because of human experiences with fire, the perceived
 affordance is to avoid the fireballs when steering the monkey.

Hidden:

- There are several instances of hidden affordances in this app prototype
 - On screen 1, a user could click any fireball, and the monkey would move up to the right. This
 possibility was not clear to the user.

- On the game screen with the fire and x, if you tap on the fire, it will take you to game screen 3 where the monkey is in position to go through the fireballs. This possibility was not clear to the user.
- On the home screen, if the user clicks on the title, "Monkey in Space," it will direct them to game screen 1, just like the play button. This possibility was not clear to the user, hence "hidden"

False:

- There are several instances of false affordances in this app prototype
 - On the screen, "Congrats, you have found Banana," the false affordance is that there is a picture
 of a burger, not a banana. The perceived affordance was that the Monkey would find a Banana,
 but the result did not happen from that possible action, and it was a burger instead.
 - The perceived affordance is that the up and down arrows would move the monkey up and down. However, the up and down arrows move the monkey right and left.
 - On game screens 1, 2, and 5, the perceived affordance is that the stop symbol would simply stop
 the game. However, it takes the user to a dead-end screen with a picture of a tropical island and
 no way of going back to any other screen.
 - On game screen 5, the perceived affordance is that the stop symbol would simply stop the game. However, it takes the user back to the home screen.
 - On game screen 3, the perceived affordance is that the pause symbol would pause the game.
 However, it goes directly to "Congrats, you have found banana"
 - On game screen 4, the upper "down" arrow takes the user back to the home screen although the perceived affordance is that this would move the monkey downwards direction.
 - On game screen 2, the upper "down" arrow brings you to game screen 5 with the fire with an x.
 The perceived affordance is that the downward arrow would move the monkey in a downward direction.
 - On the screen "Congrats, you have found banana," the replay symbol sends the user to game screen 5 with the fire with an x over it. The perceived affordance was that this symbol would restart the game
 - On the screen "Congrats, you have found banana," the replay symbol sends the user to game screen 5 with the fire with an x over it.
 - On the screen "Congrats, you have found banana," the replay symbol sends the user to game screen 5 with the fire with an x over it. The perceived affordance was that this symbol would bring the user to the home screen.

Mapping:

Visible:

- There are a few instances of visible mapping in this app prototype
 - Visible mapping is the direction in which the monkey is moving, which visibly seen by the user
 - The moving of the galaxy background is another element that is visibly seen by the user as they go through screens

Apparent

- There are a few instances of apparent mapping in this app prototype
 - The play symbol in the home screen is an instance of apparent mapping as it is seen and the user can perceive it as a play button it directs user to game screen 1.

Improper

- There are several instances of improper mapping in this app prototype
 - o The game screens do not necessarily follow a chronological order
 - There are several instances of buttons not directing to the screens "they are supposed to"
 - o Dead end screen screen with tropical island and palm tree
 - The up and down arrows are facing each other when they shouldn't be, this is a strong example of improper mapping.
 - Only way to go back to the home screen after play symbol is pressed is by finding the way to game screen 5 with the fire and x, and tapping the stop symbol on that screen.