CS449 - Human Computer Interaction
Assignment-4
Heuristics/Inspection Based Usability Testing of a Game

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Game Information:

'Gezdir' is an interactive application/game developed by Eyesoft. The game begins with a straightforward sign-up or login process, requiring email validation for new users. Once logged in, the app utilizes GPS to display a map with the user's current location pinpointed. A cone of view indicates the phone's direction, and a pulsing blue radar-like circle surrounds the user's location. The objective is to explore the campus, locating and collecting various items distributed randomly on the map. Upon approaching an item within the radar's reach, users can press to collect it. There are four distinct item types, each triggering a dialog—either a question, a picture of the location, or information about the site—depending on the item. The collected items contribute to the player's score, visible in the inventory, providing a type-by-type breakdown of items. As for my experience, installation and registering took approximately 5 minutes, then in total, I have played around an hour by traveling around the campus and in total I have collected 30 scores.

2-Heuristics Evaluation

The heuristic evaluation of the application is provided as a table below:

Heuristics	Explanation of the Problems	Propose Solution(s)	Seriousness
Visibility of system status	1- Score indicator on top obstructed by iPhone notch; not visible clearly. (screenshot 1) 2- Application appears as fullscreen, the system indicators of the phone cannot be seen.	1- Redesign the placement of the score indicator to accommodate various screen types and notches. 2- Various types of screen types must be considered	Middle
Match between system and the real world	1- Cone of view updates slowly, users experience delays. (screenshot 2)	Optimize the update speed of the cone of view to enhance the user experience and responsiveness.	High
User control and freedom	1- Purpose or effect of questions upon collecting items, and purpose of item types is unclear. (screenshot 3) 2- At each launch, same tutorial appears which will eventually be frustrating for experienced users (screenshot 4)	1- Implement consistent and standardized feedback for collecting items to clearly communicate the impact of the action. 2- Offering the option to not show the tutorial again.	High
Consistency and standards	1- Arrow icon on the top right is unclear in purpose; users couldn't understand its representation. (screenshot 5)	1- Provide clear tooltips or labels for the arrow icon to communicate its purpose to users. Consider redesigning the icon for better visual communication.	Middle
Error prevention	1- 'Go back' button in profile screen is very close to 'Delete account' and 'Log out' buttons, which do not get confirmation. (screenshot 6)	1- Buttons which perform critical actions should be located separately and should require confirmation. 2- Buttons with generic purposes should be located where they expected to be. (For example: Go back button should be located at top left as users expect)	High
Recognition rather than recall	1- Keyboard behaviour is strange and hard to track during registration and login. (screenshot 7)	1- Enhance the clarity and predictability of keyboard behavio during user interactions.	Low
Flexibility and efficiency of use	1- App downloads around 4MB of data at each launch; purpose unclear. (screenshot 8)	1- Clarify the purpose of data downloads and consider optimizing the download process to make it more efficient. Inform users about the download necessity.	High
Aesthetic and minimalist design	1- Design inconsistency between components and pages, poor quality map, unrelated components style.	1- Redesign the interface for a more cohesive and modern look. Ensure a consistent visual style throughout the app, improve the map quality, and fix non-functional components.	Middle
Help users recognize, diagnose, and recover from errors	1- Sometimes nothing loads on the dialog after collecting an item; however, buttons for confirm or cancel the dialog appears and pressable	1- Implement error handling and informative messages to guide users when the expected content fails to load after item collection.	High
Help and documentation	Guidelines are adequate; the game provides enough information.	-	-

References

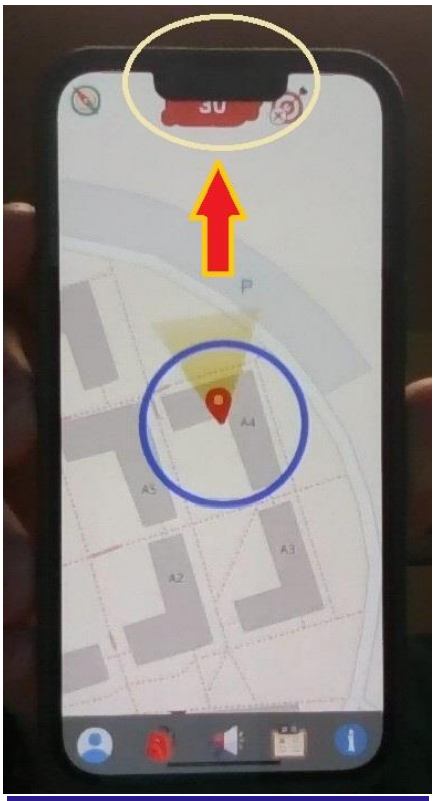
Nielsen, J. (n.d.). *Usability Heuristics for User Interface Design.* Nielsen Norman Group.

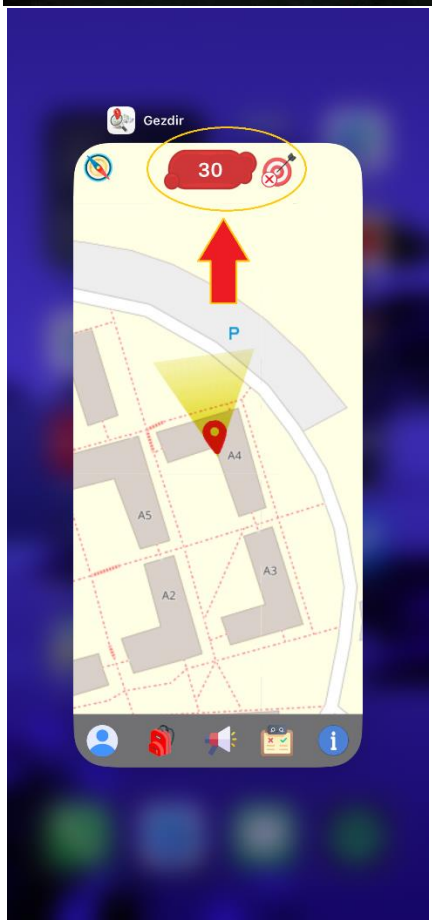
Nielsen, J. (n.d.). *Usability Heuristics Applied to Video Games.* Nielsen Norman Group.

XEROX Heuristics Evaluation Checklist

Screenshots

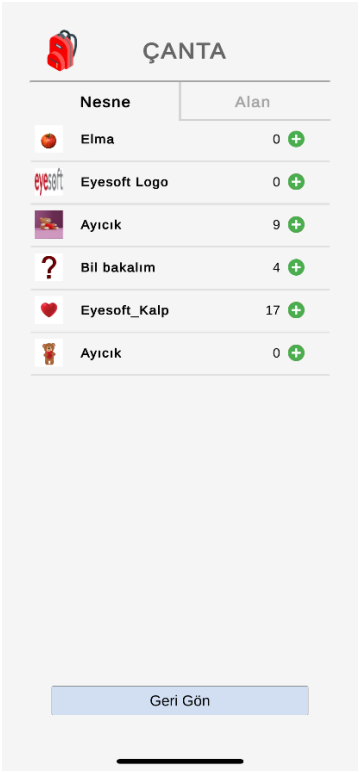
1- Top notch:



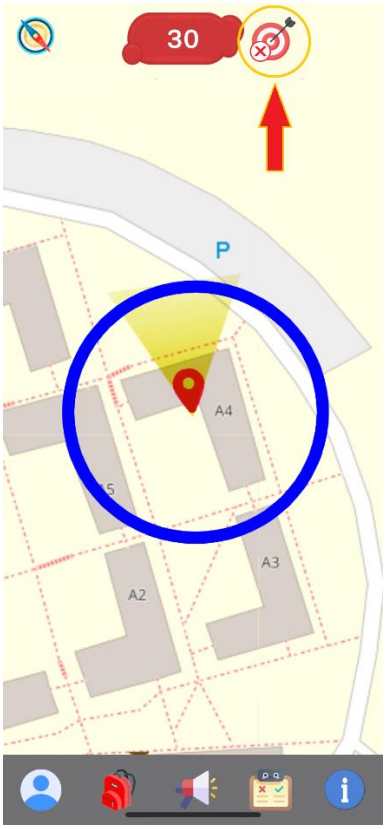


2- Cone of view (compass gets updated but cone of view does not):

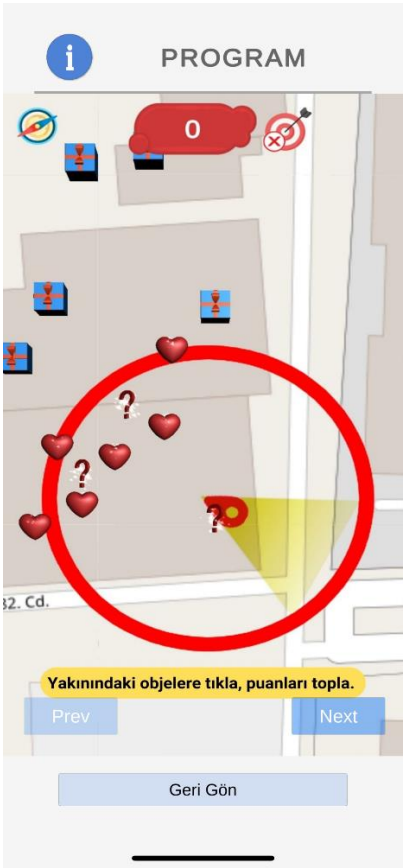
3- Unclear purpose of item types:



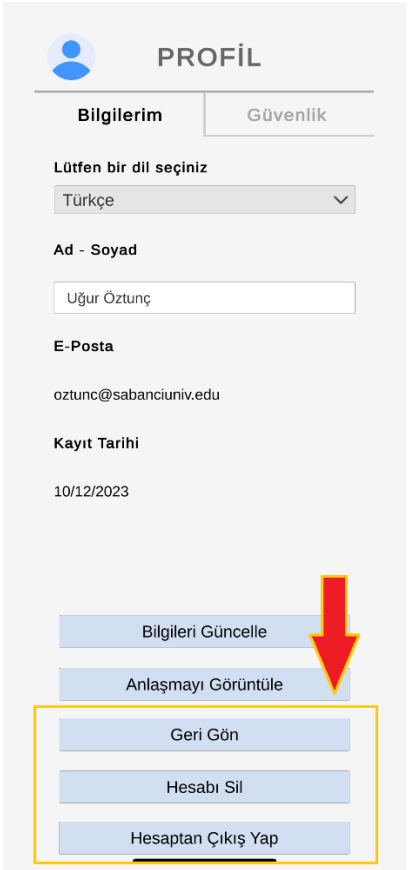
5- Arrow icon:



4- Tutorial Screen



6- Go back button:



7- Keyboard:

8- File downloading: