Activity 05

Rapid application Development

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Advantages and disadvantages of forms of prototypes

Prototypes may not always resemble finished goods. They can differ in terms of faithfulness. The fidelity of a prototype relates to how well it communicates the final product's appearance and feel.

1) Low fidelity prototypes

Low-fidelity prototyping is a simple and rapid technique to turn ideas for new products into testable prototypes. Low-fidelity prototypes are used to test and evaluate functionality rather than the aesthetic of a product.

i. Advantages:

- Low fidelity testing's main advantage is that it may help you save a lot of time.
 Low-fidelity prototyping is therefore excellent for quickly gathering input on concepts and returning to the drawing board to produce superior versions.
- Simple scribbles on paper using a pen or pencil are the most basic app simulators. As a consequence, regardless of their design talents, anyone may apply the approach. As a result, a low-fidelity prototype will normally evoke higher levels of group engagement during the brainstorming process.
- This doesn't required special skills so more people can involve
- It is low cost because it doesn't need skills of professional designers.

ii. <u>Disadvantages</u>

- When evaluating individuals, it might be difficult to distinguish what is supposed to work and what isn't. A low-fidelity prototype requires a lot of creativity from the user, which restricts the outcomes of user testing.
- Complex animations or transitions are tough to communicate with this style of prototype.
- Need to do the presentation of the porotype in manual way. It takes more time.

2) Medium fidelity prototypes

A mid-fidelity prototype is a sort of prototype with limited functionality but several clickable areas that demonstrate how an app interacts and navigates. They're usually built on user scenarios and storyboards. Using a mid-fidelity prototype, displaying charts is straightforward. The prototype stresses proper content description in general. A basic visual design is produced for each activity step. In terms of verifying the interaction concept, the mid-fi prototype functions wonderfully.

i. Advantages

- A mid-fidelity prototype allows you to move quickly from concept to implementation.
- During the implementation stage, the prototype also allows for additional flexibility, experimentation, and innovation.
- Extraneous design aspects that may be deleted while building the real front end utilizing the mid-fi prototype are not necessary.
- It features key interactions from the final solution, allowing users to test the prototype.

ii. <u>Disadvantages</u>

- A mid-fidelity prototype's most significant drawback is its restricted applicability. All that's left for us to do now is put our creations to the test. This implies that we may not have a firm grasp on how the final solution will see and feel.
- A mid-fidelity prototype will take longer to make and will cost more.
- As a result, it's preferable to use low-fidelity models to review and eliminate flaws and assumptions in the early phases.

3) High fidelity prototypes

Although a low-fidelity prototype or wireframe might be useful for swiftly testing ideas, after a project has developed and final goals have been identified, high-fidelity wireframes or prototypes are typically preferred.

i. Advantages

- High-fidelity prototypes are frequently mistaken for real objects by users. This
 means that during usability testing sessions, test participants will be more likely to
 respond spontaneously, as if they were using the real product.
- A high-fidelity software simulation's main advantage is that it can not only look like the final product, but it can also function like it if necessary. Because some interactions are difficult to communicate using low-fidelity approaches, a highfidelity simulation may be your only choice for giving testers a genuine sense of what your app is capable of.
- This form of prototype can also help with stakeholder demos. It provides a clear image of how a product should work to customers and possible investors. A highfidelity prototype may pique people's interest in your concept in ways that a lowfidelity, bare-bones prototype can't.

ii. <u>Disadvantages</u>

- When compared to low-fidelity prototypes, high-fidelity prototypes come at a higher cost, both in terms of time and money.
- Clearly, creating a prototype that looks, feels, and works like the real thing requires a lot more effort than jotting a few thoughts on a piece of paper. A high-quality mockup, wireframe, or prototype might take months to create, but a low-fidelity prototype can be created in minutes.