

Project Two

Explain the rationale behind design choices.

The design decisions that were made for the two screens for Kiva borrowers were all based on several factors. First, there is the form factor. With the primary use coming from a flip phone, which is an embedded system, that places limits on what can be displayed due to the small size of the phone screen. Second, after looking at many of the user stories, the locations of many of the Kiva borrowers could present bandwidth or connectivity issues for the user. With this in mind, it is vitally important for the screens to be minimal. By keeping the screens simple, they should load quickly and require minimum internet or cellular bandwidth to load the information onto the borrowers flip phone. Lastly, and with taking these constraints into account, the priority needs of the borrowers dictated which information would be displayed.

The first screen, which serves as the entry page, contains the most important information about the status of the borrower's loan. The design benefits the borrower by giving them the important information they need upfront, in an easy-to-understand manner. At the bottom of that page is a link so they can navigate to the second screen where they can make a payment toward their loan. The second screen shows the amount due and the date it is due. Below that is a text field where the payment amount can be entered. At the bottom of the page are two links; one to submit the payment and the other to cancel the action. Additionally, there is a button at the top of the screen to take the user back to the entry page without completing anything on the payment page. With the design making it easy to repay the loan, this then benefits the customer (Kiva) by keeping the users engaged.

Recommend how the design could be adapted for a cloud-based system.

When adapting the designs for a cloud-based system, it is important to keep the design in alignment with the Kiva business vision and model. This can be accomplished by adhering to the guidelines that Kiva has set forth in their Kiva Code of Conduct. From that the important parts are to respect the users, not misrepresent the data, be your own brand, and keep the data in sync with the API (Kiva, n.d.).

For Kiva Loan Lenders, their priorities consist of exploring borrower requests, analyzing lending data for both them and other lenders, and following borrower loan payments. In order to do that there must be communication between the different application components. For this cloud-based system to work there needs to be communication with getting data from the different Kiva tables, such as loans, loans_lenders, and lenders. The communication between different application components can be optimized through only requesting and sending the required data for a request. Sending an entire record from a table could be inefficient due to the unneeded data contained in the record that isn't needed for the request.

The lenders of Kiva can have varied goals. To start with, some may be interested in being able to help others achieve their goals through financial assistance. Other goals could simply align with the data priorities of a lender and wanting to explore borrower requests, analyze lending data for both them and other lenders, and follow borrower loan payments.

References:

Kiva. (n.d.). *Code of Conduct*. Retrieved February 11, 2023,
from <https://www.kiva.org/build/code-of-conduct>