

PRG03 : food quest

=====overview

This is an individual programming assignment; however, it will not be done in Android! Instead, you will be using [framer.js](#) as the programming platform to implement your design. With framer.js (which is available as a free trial) there will be more emphasis placed on the visual and interactive design elements. This assignment is also more open-ended allowing you to explore your design skills rather than focusing on implementing some exact specifications. We are also not concerned about the actual hardware, except that you will need to use one of the mobile and watch form factors that framer supports. This means an Apple iPhone variant or Nexus Phone. The only watch form factor supported is the Apple Watch. These settings enforce particular screen size, but even though you'll see the Apple Watch the design is likely applicable to a wide range of other smartwatch-like form factors (including your round Moto 360s).

=====the assignment

You will be designing a collaborative local recipe app for a group of friends with smartwatches. This assignment focuses heavily on the **design** aspects of this application, so those parts are left open-ended for you to implement and explore as you see fit. Images by flickr users maxful, hernanpc, perspective, 13678361@N02, 52421717@N00, and 22193699@N04.

When Brian installs the app, he sets up a personal taste profile. This includes information about whether he's vegetarian, if he has any allergies, if he prefers spicy food, etc. You should carefully consider the types of preferences you let your users set up and come up with good iconography for them. You may also want to consider degree of preference for these settings: perhaps Brian doesn't like spicy food, but he REALLY likes chocolate, so if a food is spicy but has chocolate in it he'd be willing to try it.

When Brian finds an unusual ingredient while travelling, he can open his app. He bought a papaya in a shop stall, but isn't really sure what to do with it now. He can open the app and input "papaya". Brian additionally chooses several friends that he would like to share his papaya with. (Note that Brian's friends can set a status in their app, indicating if they are "offline" or "curious", and the app will only show curious friends.)



The app now searches for local recipes that match Brian and his friends's preferences and that include a papaya as an ingredient. It finds one, say Thai Green Papaya Salad, but does not tell anyone what it is. Instead, it creates a shopping list of ingredients for the salad, and passes one item to each of Brian's friends' apps. (You may also want to let users set a "budget" for their food adventures, and assign recipe ingredients to each person based on this budget.)



But the app is still keeping secrets. It doesn't tell any of Brian's friends what it is they're looking for: it only begins to give them directions on their watches (there are many fun ways you could design this direction-giving interaction; does a particular user prefer walking? cycling? taking public transit? We won't let users drive private cars, as they're travelling and aren't going to have cars with them!). Ultimately, the app will lead each friend to a nearby market stall where they can get their assigned ingredient. When they arrive at the

destination, they'll be presented with a picture of the ingredient, which they can use to find it in the stall or to ask the shop owner if they aren't sure what it is. (You may also want to display the name of the ingredient, or its name in the local language, or other information you think may help them find the ingredient.)



Once each of Brian's friends indicates that they've found their ingredient, they are led to Brian's hostel so they can prepare the Green Papaya Salad. When everyone has arrived, Brian receives the recipe so they can all get cooking!



How should this experience be designed? While your app and watch UI design must accommodate the interactions specified above, much of the details of the design are left for you to develop. You can be literal with lists or visual with icons, shapes, or colors. Framer.js will allow you to mock up and screen capture your interactions. More importantly you will be able to easily explore various animation, transition, and visual design choices for navigating the various friends, locations, desirability features, and navigation concepts. You will hand in a video along with a subset of selected screenshots and your framer.js code.

=====grading criteria

This is an OPTIONAL assignment. If you choose to do it, it will be averaged into your PRG grade alongside PRG01 and PRG02. There is absolutely no penalty for not completing this assignment. Due to this, we will absolutely not accept late assignments in any circumstances (well, ok, there are some circumstances, e.g., rise of Cthulhu, that would change our minds here, but not many).

This project is worth 30 points and will be graded as follows:

Did the resulting application demonstrate the **full required functionality** as described? (15 pts) (fractional credit for missing features; features will not receive credit if they aren't demonstrated in the video)

Users should be able to:

- Set up their personal taste profile (2 pt)
- Change their status to “offline” or “curious” (1 pt)
- Share an ingredient, which:
 - Creates a shopping list for a recipe containing that ingredient (2 pts)
 - Notifies curious friends of the food quest (1 pt)
 - Assigns an item in the shopping list to each friend who accepts the food quest (1 pt)

If a user accepts a food quest, they should:

- Follow directions to a market stall for their assigned ingredient (3 pts)
- Be shown the ingredient when arriving at the stall (1 pt)
- Be given directions to the creator of the food quest, who receives the recipe when everyone has arrived (4 pts)

Does app use **good visual design** rules in terms of fonts, color selection, layout, whitespace, etc.? (5 pts)

Does app use **good interaction design** techniques? Does it include good use of transitions, animations, etc.? (5 pts)

Is there a **consistent design language** used throughout the experience and across the overall design? (5 pts)

If you fail to submit either the video or the code, you will receive no more than 50% credit for the assignment.

If you feel your design goes above and beyond in some way (e.g., you implement a step-by-step recipe instruction function dividing work among the friends, or render each friend's GPS path trace as an image to share, or do a really amazing job of designing one of the existing specified interactions), please call it out in your video and we may assign up to 5 pts extra credit for such features.

=====*submission instructions*

Please submit your assignment to hackster. To make grading easier on the TAs, we also ask that you share a link to your hackster submission on bcourses.