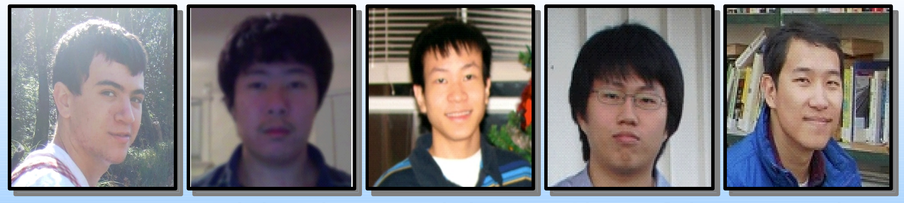
OneProsper International

"To reduce world hunger and improve nutrition by providing small farmers with innovative drip irrigation kits"

Group 11 • UC Berkeley • CS169 • Fall 2012



Ben Augarten | Richard Lin | Minh Phan | Chungfai Tsim | Derek Zhang

The Problem

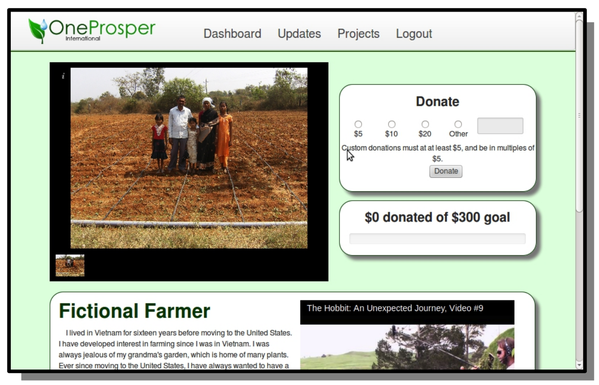
- The problem: need to raise money to provide drip irrigation kits to farmers in India
- Want a fun and interactive method to raise money

The Solution

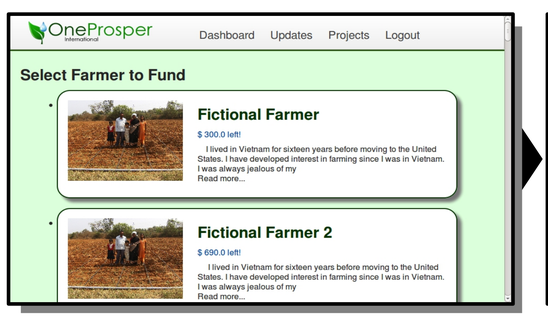
- Goal: create a crowdfunding website where individuals can take action and donate
- Let donors see the farmer they are donating to and the impact of their contribution
- Add a social aspect to allow users to email friends to donate
- Track the amount of money raised by each user's campaigns

Features

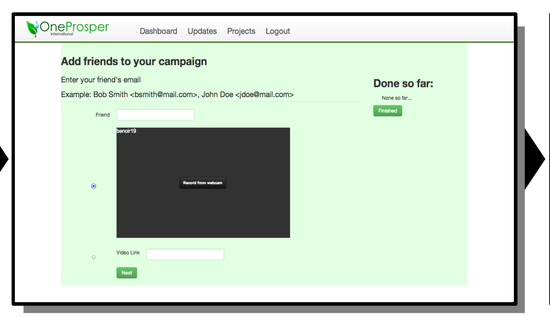
- Administrators can create projects pages for farmers
  - Each project page can have YouTube videos and pictures of the farmer
- Users can donate to farmers
- Each donation is associated with a specific farmer, and funding for each farmer can be tracked



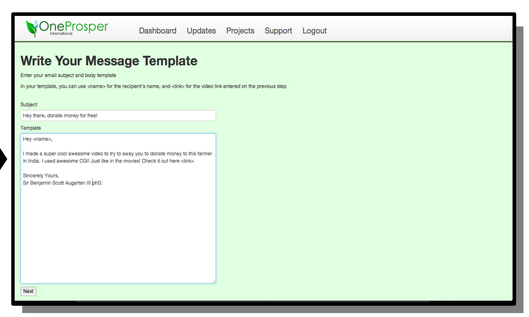
Project statistics



Select farmer



Add friends and videos



Write email template

Send from your address

- Users can start a campaign for a farmer, soliciting donations from their friends through a personalized video and email

The Campaign Process

Design Decisions

- Leverage existing gems instead of reinventing the wheel
  - User accounts and authentication, YouTube API, Stripe payment processing, pagination, and email validation all rely on gems
- Common user accounts for both donors and campaigners
- Keep all routes RESTful
- DRY out code using helper methods

Challenges

- Testing Javascript
- Testing external services like Stripe
- Integrating with external services, including payment processor, YouTube, and Dropbox
- Merge nightmares caused by overlapping features

Lessons Learned

- Start off with Javascript test suite – is intimidating to set up in the middle of a feature
- RTFM (Read the Friendly Manual) when working with external APIs
- Be aware of teammate's features and predict points of conflict