



# **NEW RIVER VALLEY TIMEBANK**

A neighbor to neighbor network  
to share skills and services

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**Virginia Tech, Spring 2016 CS-4624  
Blacksburg, VA 24061**



# Outline

- What is TimeBanks?
- Goals
- Design
- Prototyping
- Implementation
- Status and Future Goals

# What is TimeBanks?

- Non-profit organization
- Facilitates service exchanges
- Users exchange services for hours, which function as Time Bank's currency.
- Useful for people in need of particular services
- Soft-launch this year



# Goals: Support NRV

- Promote tight-knit community within NRV
- The NRV Time Bank supports the NRV area
  - Community events post launch
- Promote community inclusivity
  - Everyone has skills to offer

# Goals: Build a Better System

- Facilitate easy access to information for Time Bank staff
- Implement necessary time bank functionality
  - User data
  - Offers & Requests
  - Hour tracking
- Provide a more usable interface to NRV Time Bank services compared to currently available interfaces

# Popular System: hOurworld.org

- Pros
  - Capable back-end
  - Integration with other time banks
- Cons
  - Usability issues
  - Lack of interface customization options
  - Poorly documented API



# Design Approaches

- Two possible approaches:
  - Create wrapper around hOurworld using API
    - Poor documentation of the API was a barrier
  - Create our own site
    - Use WordPress and its plugins to alleviate the workload
    - Create functionality with a MySQL database and PHP scripting

# Prototyping

- Focused on workflow and usability
- Outline issues to be addressed during implementation
- Provide examples to interviewees for data curation

Neighbor to Neighbor Time Bank

NINTimeBank.org/account

Neighbor to Neighbor Time Bank

Total Hours: 132

Account Offers Requests Help

Your Account Info

Name: Randy Marsh

Email: rmarsh@rmarsh.com

Hours Spent: 210

Hours Received: 342

Transaction History

Transaction 1

Transaction 2



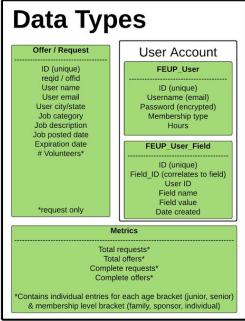
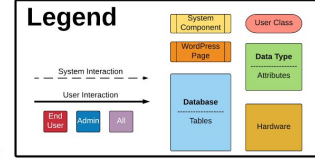
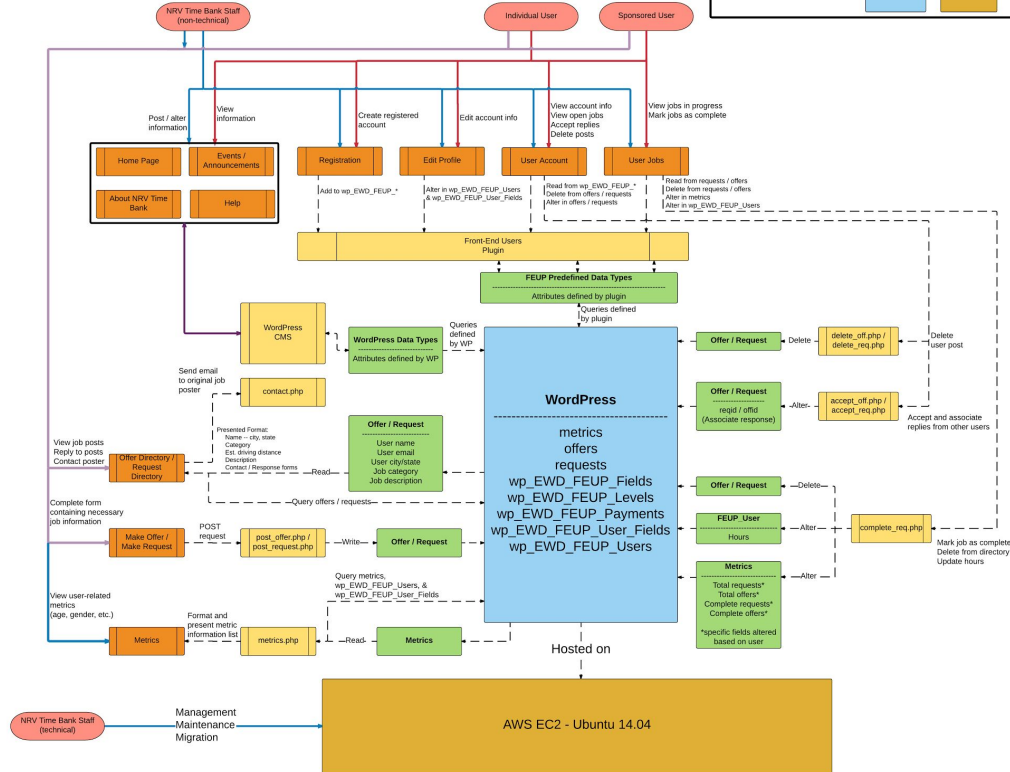
# Implementation

- Mostly consists of PHP scripting
  - Back-end: Database interactions/alterations
  - Front-end: HTML generation via PHP embedded in WP pages
- Database setup
  - Adding tables to store our own data types
    - User data
    - User posts

# Entity Relationship Diagram - Interface to NRV Time Bank Services\*

Kyle Tanous & Aaron Richards


\*Database only lists tables created by us or provided by plugins



## Implementation Diagram

<http://tinyurl.com/rediagram>

# http://52.32.67.219





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Member login:

Home Page My Account Requests Offers About NRV TimeBank Register for Membership

Under Construction  
Thank you for your patience as our site is temporarily under construction.



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### Requests


Search

Most Recent ▾

2016-01-17  
Kyle — Blacksburg, VA  
Animal Care  
Distance: 1.7 Miles  
test req 1

**Recent Posts**  
The site is live! December 1, 2015  
Welcome to your Neighbor to Neighbor  
Timebank! November 4, 2015

**Recent Comments**



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### About NRV TimeBank

Search

**What is a TimeBank?**


A TimeBank facilitates service exchanges between community members, using a currency of Time credits rather than money. When a member provides one hour of service for someone, they earn one Time credit. They can then spend this Time credit by receiving an hour of service from someone else. Services range from animal care, child care, yard work, resume editing, software help, etc. A TimeBank is a way for the community to share their time, skills, and talents with each other, and mutually benefit from the exchange. TimeBanking mobilizes a cycle of paying it forward, where each act of helping someone gets passed along to another, and another, and another, as Time credits are earned and spent. It is an old idea made new—the idea that a sense of community is established when neighbors make a practice of helping each other.

**Recent Posts**  
The site is live! December 1, 2015  
Welcome to your Neighbor to Neighbor  
Timebank! November 4, 2015

**Recent Comments**

**Where did this idea come from?**

Back in 1980, an Englishman by the name of **Edgar S. Cahn**, a professor and writer by profession, thought of the TimeBank concept as a way to match "social capacity to unmet social needs" (2013). Cahn observed that social service programs and organizations often focus on a deficit-based approach, in which people receiving help are viewed only in terms of their needs, and not their assets and potential. Cahn's TimeBank uses an **asset-based approach**, in which social service needs are met through focusing on everyone's ability to contribute to the community. In this model, someone in need of help is not regarded as a charity



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### My Account

Search

Name: Aaron Richards  
Email: aaronr2@rt.edu  
Gender: Male/female  
Phone Number: 5555555555  
Date of Birth: 1984-01-01  
Location: Blacksburg, VA  
24060  
Hours: 10

**Open Requests**  
You have no active requests

**Open Offers**  
You have no active offers

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Timebank! November 4, 2015

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# Future Goals

- Register domain
  - User-to-user contact
  - Administrator-to-user contact
- More effective information delivery (real-time feeds/chat)
- Rich media help and about pages
- More thorough documentation

# Acknowledgement

Zoe Belyavsky, our client, along with Ellen Stewart of NRV Time Bank have been ever-present sources of guidance during development. Her insight into requirements set forth by the TimeBanks organization proved invaluable throughout the development cycle in ensuring we delivered a suitable software system to the NRV Time Bank.

**Questions?**