

| Version | Date | Description | Author |
|-------------|-----------|-------------|-------------|
| Inception 2 | 4/15/2017 | No changes. | Kirby Owens |

Introduction

We will be creating a social network aimed specifically at NKU students and faculty called NKU-Net. The social network will be focused on communication channels in which anyone can participate. Conversations will be open to any NKU student or faculty member who has something to contribute to the conversation.

Positioning

Problem Statement

The existing Blackboard forums is not a convenient space for knowledge sharing and collaboration among students. The current Blackboard forums creates a barrier of knowledge by only allowing current students in a specific section to communicate with each other. This barrier prohibits students from asking questions to more experienced students in a digital format. This affects students and faculty members as multiple students from different sections may contact the same professor for the same question even after it's been answered on the forum in a different class section.

Product Position Statement

NKU-Net combines students in every section so that knowledge can be spread through the whole course and not just section to section. NKU-Net also promotes collaboration and knowledge sharing with a rating system for answers. Students and faculty can upvote or downvote answers to provide incentive for students to answer questions. NKU-Net aims to combine students who have completed the course with current students to provide them with online mentors. Finally, NKU-Net provides students and faculty members with user pages where current schedules and contact information is listed. These user pages also act as a place to store class materials and diagrams to help other students, and their reputation score.

Alternatives and Competition

| Product | Strengths | Weaknesses |
|------------|---|--|
| Blackboard | <ul style="list-style-type: none">• Intuitive Interface• Well known by students/faculty• Not buggy | <ul style="list-style-type: none">• Design not responsive. Does not work with mobile.• Limited discussion post features• Lack of personal pages• Too many features |
| Canvas | <ul style="list-style-type: none">• Plenty of discussion board features (especially multimedia options)• Good, responsive mobile site coverage• Basic profile functionality (can upload files to profile, create “eportfolio” to show work.• Has a “commons” area where courses from other universities can share lessons/files. | <ul style="list-style-type: none">• Cluttered/disorganized user interface (too many features all at once).• Like system on the discussion boards but not an “upvote/downvote” system.• Disorganized discussions. No tags/groups to organize discussions. |

Stakeholder Descriptions

Market Demographics

- Most users will be undergraduate students that are typically young adults.
- Student gender distribution: 56% female, 44% male.

Stakeholder (Non-User) Summary

Non-users of this system are members of administration at Northern Kentucky University (NKU).

User Summary

Users of this system, NKU-Net, will largely be students at NKU, in addition to faculty members at NKU. Other users will include registrars—who will be tasked with adding courses and students to NKU-Net—and administrators—who will be tasked to monitoring and editing the system.

Key High-Level Goals and Problems of the Stakeholders

| High-Level Goal | Priority | Problems and Concerns | Current Solutions |
|--|----------|---|---|
| Fast, robust, real-time updates in question/answer system. | high | Handling heavy traffic on network if question is handling multiple simultaneous question updates. | Using IaaS platform with heavy traffic scenarios handled efficiently. |
| Design of product is usable on variety of platforms, from desktop to mobile devices. | medium | Adjusting web layout so that it is appropriate on any given device. | Twitter's Bootstrap framework should be able to handle this concern. |

User-Level Goals

The users (and external systems) need a system to fulfill these goals:

- Student: post questions, answer questions, upvote and downvote answers, have individual profile page, upload documents.
- Faculty: post questions, answer questions, upvote and downvote answers, have individual profile page, upload documents.
- Registrar: add students to NKU-Net, add faculty members to NKU-Net, add courses to NKU-Net, add student schedules each semester.
- Administrator: Edit/delete questions and answers, add/edit/delete forms to add special users to system, add students to NKU-Net, add faculty members to NKU-Net, add courses to NKU-Net, add student schedules each semester, post questions, answer questions, upvote and downvote answers, have individual profile page.
- Reputation System: Handles upvote/downvote system to rank users.
- Question/Answer System: Handles the questions and answers portion of application.

User Environment

Users will be using this system through a web browser on either a desktop, laptop, mobile device, or any other technological device with a web browser and a functional Internet connection.

Product Overview

Product Perspective

NKU-Net, as a social networking site, will be independent and self-contained.

Summary of Benefits

| Supporting Feature | Stakeholder Benefit |
|---|---|
| Functionality, the site will have familiar components that will improve the ease of use. | Ease of use. |
| No sign-up, the registrar will be held responsible for adding new faculty and students. The main user base will not have to sign up for anything. | Users will be more open to using the product. |

Assumptions and Dependencies

- We assume that students from all sections of a class, old and new, can answer/ask questions.
- We assume that there will be an upvote and downvote system.

Licensing and Installation

Since this website is being used for academic purposes there are no licenses needed. No installation will be required because it will be a website.

Summary of System Features

- An upvote and downvote system of determining best answers to questions
- The ability to look at questions other students have posted for a class and the responses.
- The ability for faculty to answer questions that other students have posted.
- The ability for there to be special users with permissions to add users and classes.
- The ability for there to be special users with permissions to remove unwanted questions or answers.

Other Requirements and Constraints

- The application should function on all major web browsers (Chrome, Firefox, Safari, Internet Explorer).
- The application should function under a heavy load.
- The application should have high availability as students and faculty could depend on the application during any time of the day.