

# Project BoxSand

GROUP 6

## Team Boxsand



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# What is Project BoxSand?

# WHAT IS PROJECT BOXSAND?

An open source **Learning Module System** that will be used by students to learn course material and complete online homework through an all-in-one online learning environment. The main goal of BoxSand is to improve student performance by providing access to free and open source resources all in one place.

# PURPOSE AND GOALS - FOR THE YEAR

- Develop long-term and overarching **development goals and procedures** for future project development.
- Create an initial **proof of concept** for site functionality demonstration and future feature integration. This entails a website that...
  - Provides access to the OpenStax Physics textbook within the site and allows an instructor to assign reading from this textbook.
  - Provides a homework system where an instructor can provides questions, assign a value to the question, and create an assignment out of a grouping of questions.
  - Provides a way for students to complete the assigned homework and reading.
  - Provides a way for an instructor to download a gradebook of scores.

# PURPOSE AND GOALS - WINTER TERM

- Establish a working model of the site utilizing the foundation laid down by the people at OpenStax.
- Craft and mold the OpenStax foundation to meet the Project Boxsand specific requirements

# Progress of the Project

# CURRENT PROGRESS OF THE PROJECT



## Plan for Implementation

- Develop Understanding of Project Requirements
- Research potential solutions and methods of achieving the goals
- Create initial plan for implementation



## Phase One of Implementation

- Formulate a development space
- Begin development of the site

## ☐ Phase Two of Implementation

- Wrap up development for this cycle of the project
- Prepare project for use by the next development team

# CURRENT PROGRESS OF THE PROJECT - SAM

- Exercises database
- Open source textbooks
- Account verification through email
- Authentication through the Oregon State University login system (CAS)



# STUMBLING BLOCKS - SAM

- OpenStax code base - extremely large and has a huge amount of dependencies
- Familiarity with Ruby on Rails
- OpenStax and their willingness to work with us

# NEXT STEPS - SAM

- Tracking system
  - Where a user clicks on the website
  - How much time they spend on particular pages
  - How much time they spend watching videos or looking at simulations
  - How long a user spends on a particular homework problem
- Style of the OpenStax website
- Professor posted modules for students

# CURRENT PROGRESS OF THE PROJECT - MAX

- Accounts
- Tutor
- Exercise (and Books)
- Tracking
- Development processes + docs
- Production deployments + docs
- Style + Branding

# STUMBLING BLOCKS - MAX

- Keeping code changes that are temporary out of long term code commits
- HTTPS/SSL
- Redis connection refusals
- Action Mailer setup for testing
- API documentation and keys
- Multi-homed deployments and testing scalability
- Removing unused features from partner codebases
- CNX archive and database issues
- Postgres user auth
- Webpack and SASS/SCSS
- Pattern Library/UX updating

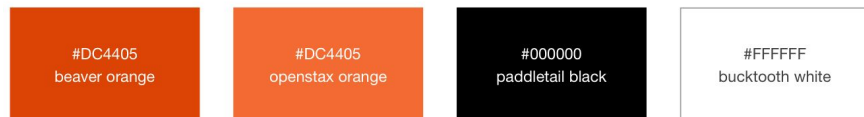
# NEXT STEPS - MAX

- Accounts
- Tutor
- Exercises + Books
- Tracking
- Deployment processes
- Auditing
- Testing Suites

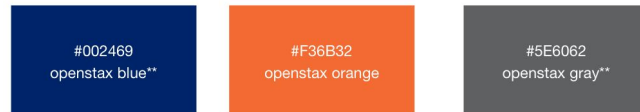
# CURRENT PROGRESS OF THE PROJECT - ANYA

## ✓ First Draft of the Style Guide

### Boxsand Brand Primary



### OpenStax Tutor Brand



### Boxsand Brand Secondary



## ✓ Logo Concept Design



# Boxsand

# CURRENT PROGRESS OF THE PROJECT - ANYA

- Cognitive Walkthrough
  - Development of goals
  - Perform the walkthrough

# STUMBLING BLOCKS - ANYA

Getting feedback on the current direction of the style guide.

Changes in process for implementing the style decisions.



# NEXT STEPS - ANYA

- Receive Feedback from Client
  - Send out first drafts to client for feedback
  - Receive and analyze feedback
- Implement Style Decisions
- Run Cognitive Walkthrough
  - Develop Goals
  - Run walkthrough
  - Analyze results

Thank you for  
watching.