

# Bookmark Library Web Browsing Tool

Bookmark



Brigadiers

Mackenzie Boyd, Forrest Guice, Justin Hill

# Introduction

- **Mentor: Dr. John Georgas**
  - Professor of Computer Science
- **Client: Mr. Brad Budinger**
  - Teacher for Havasupai Tribe



# Difficulties

- **Coordinating Student Activities**
  - **Sharing Web Pages**
  - **Sharing Assignments**
- **Performing Web Research**
  - **Tracking Notes and Sources**
- **Monitoring Web Access**
  - **Non-Educational Content**
  - **Dangerous Web Content**

# Past Solutions

- **Variety of Web Solutions**
  - **Virtual Classrooms**
  - **Bookmarking Tools**
- **Past Solution Not Designed For Small Classrooms**

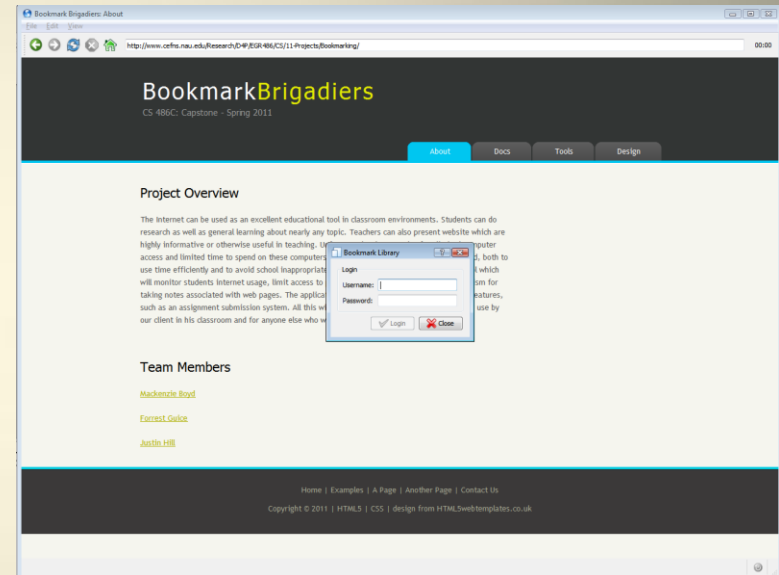
# Our Solution

- User Accounts
- Notifications
- Libraries
- Whitelist
- Notes
- Notebook
- Plagiarism checker



# Notifications

- Distribute assignments
- Remind students
- Save paper and time





# BookmarkBrigadiers

CS 486C: Capstone - Spring 2011

- About
- Docs
- Tools
- Design

## Project Overview

The Internet can be used as an excellent educational tool in classroom environments. Students can do research as well as general learning about nearly any topic. Teachers can also present website which are highly informative or otherwise useful in teaching. Unfortunately, many schools have limited computer access and limited time to spend on these computers. The application was designed to help students use time efficiently and to avoid school inappropriate websites. The application will monitor students internet usage, limit access to certain websites, and allow for taking notes associated with web pages. The application is designed to be used as an assignment submission system. All this will be implemented in our client in his classroom and for anyone else who w

Bookmark Library

Login

Username:

Password:

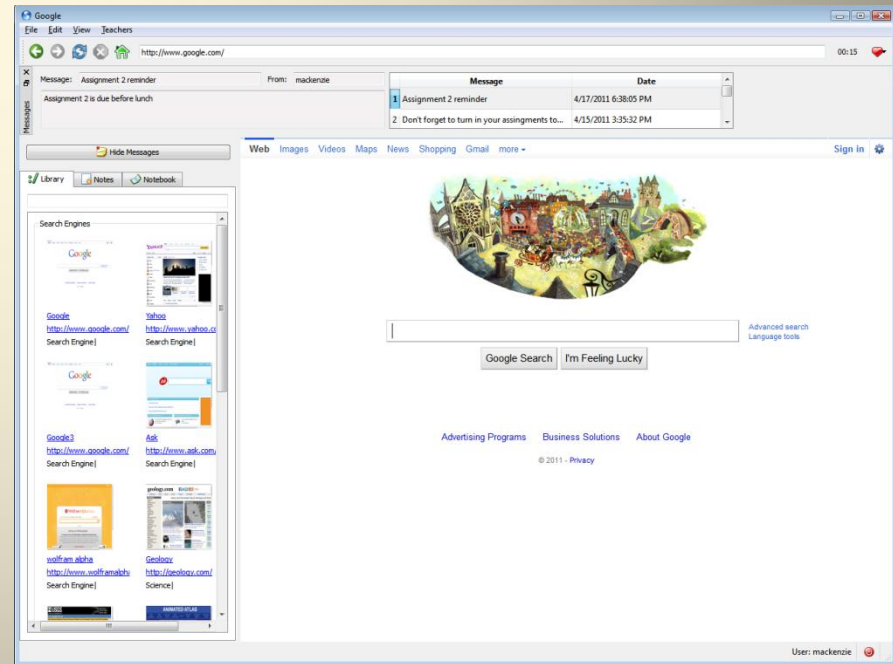
## Team Members

- [Mackenzie Boyd](#)
- [Forrest Guice](#)
- [Justin Hill](#)



# Libraries

- Difficult to get class to a webpage
- Can't easily share bookmarks
- Organizes bookmarks





Message: Today's assignment From: Teacher

For today I would like you to research Medieval buildings

	Message	Date
1	Today's assignment	4/29/2011 12:54:45 AM
2	Research assignment	4/18/2011 2:20:29 AM


Hide Messages

Web Images Videos Maps News Shopping Gmail more


Sign in

Library Notes Notebook

History



[Best of History Web Sites](http://www.besthistorysi)  
<http://www.besthistorysi>



[Middle Ages wiki](http://en.wikipedia.org/)  
<http://en.wikipedia.org/>  
unreliable]




Advanced search Language tools

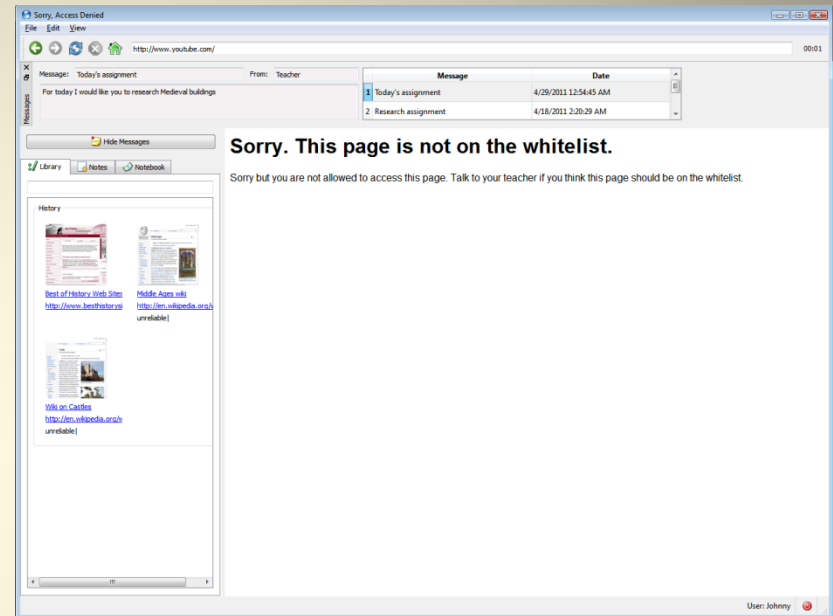
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# Whitelist

- Restricts content
  - Youtube
  - Facebook
- More control for teachers
  - Pattern matching





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## Project Overview

The Internet can be used as an excellent educational tool in classroom environments. Students can do research as well as general learning about nearly any topic. Teachers can also present website which are highly informative or otherwise useful in teaching. Unfortunately, due to limited computer access and limited time to spend on these computers, students often struggle to use time efficiently and to avoid school inappropriate websites. Our application will monitor students internet usage, limit access to inappropriate websites, and allow taking notes associated with web pages. The application also includes features, such as an assignment submission system. All this will be implemented in our client in his classroom and for anyone else who will use it.

Bookmark Library

Login

Username:

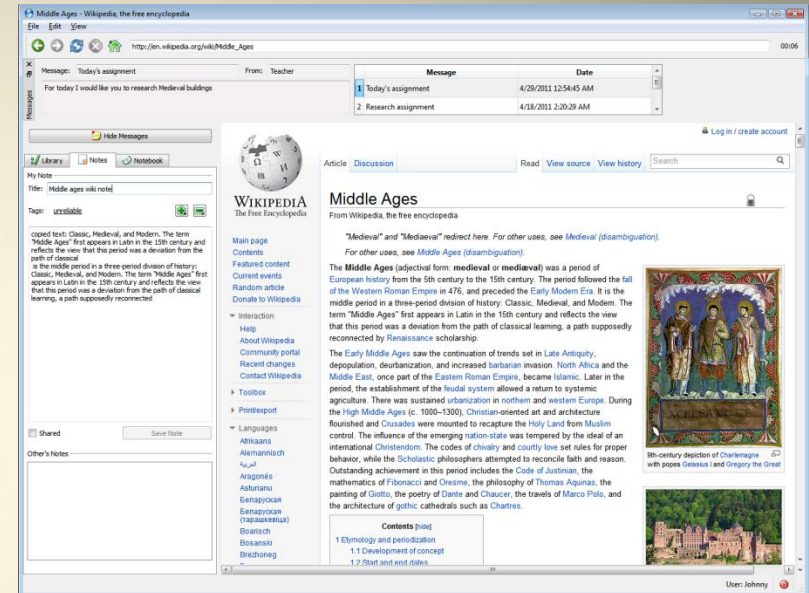
Password:

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# Notes



- Disorganized research
- Easily lost notes
- Quality and quantity of notes unknown to teacher

Message: Today's assignment From: Teacher

For today I would like you to research Medieval buildings

	Message	Date
1	Today's assignment	4/29/2011 12:54:45 AM
2	Research assignment	4/18/2011 2:20:29 AM

Hide Messages

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Sign in ⚙

Library Notes Notebook

History

[Middle Ages wiki](http://en.wikipedia.org/)  
unreliable]

[Best of History Web Sites](http://www.besthistorysi)  
<http://www.besthistorysi>

[Wiki on Castles](http://en.wikipedia.org/)  
<http://en.wikipedia.org/>  
unreliable]



Search input field

Advanced search  
Language tools

Google Search

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# Notebook

- All notes in one place
- Organize notes
- Filter notes



The screenshot shows a web browser window displaying the Wikipedia article for "Castle". The browser's address bar shows the URL "http://en.wikipedia.org/wiki/Castle". The page content includes the Wikipedia logo, the article title "Castle", and a brief introduction: "A **castle** (from Latin *castellum*) is a type of fortified structure built in Europe and the Middle East during the Middle Ages. Scholars debate the scope of the word castle, but usually consider it to be the private fortified residence of a lord or noble. This is distinct from a *fortress*, which was not a home, and from a fortified town, which was a public defence, though there are many similarities between these types of construction. The term has been popularly though inaccurately applied to structures as diverse as hill forts and country houses. Over the approximately 900 years that castles were built they took on a great many forms with many different features, although some, such as curtain walls and arrowslits, were commonplace. A European innovation, castles originated in the 9th and 10th centuries, after the fall of the Carolingian Empire resulted in its territory being divided among individual lords and princes. Castles controlled the area immediately surrounding them, and were both offensive and defensive structures; they provided a base from which raids could be launched as well as protection from enemies. Although their military origins are often emphasised in castle studies, the structures also served as centres of administration and symbols of power. Urban castles were used to control the local populace and important travel routes, and rural castles were often situated near features that were integral to life in the community, such as mills and fertile land. Many castles were originally built from earth and timber, but had their defences replaced later by stone. Early castles often exploited natural defences, and lacked features such as towers and arrowslits and relied

On the left side of the browser window, there is a "Notes" sidebar. It contains a "Filter:" section with a list of six notes, each with a "Location" and a "Share" checkbox:

	Location	Share
1	<a href="http://en.wikipedia.org/wiki/Castle">http://en.wikipedia.org/wiki/Castle</a>	<input type="checkbox"/>
2	<a href="http://en.wikipedia.org/wiki/Middle_Ages">http://en.wikipedia.org/wiki/Middle_Ages</a>	<input type="checkbox"/>
3	<a href="http://www.google.com/">http://www.google.com/</a>	<input type="checkbox"/>
4	<a href="http://www.usgs.gov/">http://www.usgs.gov/</a>	<input type="checkbox"/>
5	<a href="http://www.pbs.org/">http://www.pbs.org/</a>	<input type="checkbox"/>
6	<a href="http://www.ask.com/">http://www.ask.com/</a>	<input type="checkbox"/>

Below the notes list, there are sections for "Interaction" (Help, About Wikipedia, Community portal, Recent changes, Contact Wikipedia), "Toolbox", "Print/export", and "Languages" (Afrikaans, Alemannisch, العربية, Aragonés, Asturianu, Bân-lâm-gú, Беларуская, Български, Català, Česky).

At the top of the browser window, there is a "Messages" section with a message from "Teacher" dated "Today's assignment" and a table of messages:

Message	Date
1 Today's assignment	4/29/2011 12:54:45 AM
2 Research assignment	4/18/2011 2:20:29 AM

Messages

Message: Today's assignment From: Teacher  
For today I would like you to research Medieval buildings

	Message	Date
1	Today's assignment	4/29/2011 12:54:45 AM
2	Research assignment	4/18/2011 2:20:29 AM

Log in / create account

Library Notes Notebook

My Note  
Title: Castles

Tags:

Castles existed during the same time period as the Middle Ages and served many purposes

Shared Save Note

Other's Notes



WIKIPEDIA  
The Free Encyclopedia

- Main page
- Contents
- Featured content
- Current events
- Random article
- Donate to Wikipedia

- Interaction
  - Help
  - About Wikipedia
  - Community portal
  - Recent changes
  - Contact Wikipedia

- Toolbox
- Print/export

- Languages
  - Afrikaans
  - Alemannisch
  - العربية
  - Aragonés
  - Asturianu
  - Bân-lâm-gú
  - Беларуская
  - Беларуская (тарашкевіца)
  - Български
  - Català
  - Česky

Article Discussion Read View source View history Search

# Castle

From Wikipedia, the free encyclopedia

*For a list of all castles, see List of castles.*

*This article is about medieval fortifications. For other uses, see Castle (disambiguation).*

A **castle** (from Latin *castellum*) is a type of fortified structure built in Europe and the Middle East during the Middle Ages. Scholars debate the scope of the word *castle*, but usually consider it to be the private fortified residence of a lord or noble. This is distinct from a *fortress*, which was not a home, and from a fortified town, which was a public defence, though there are many similarities between these types of construction. The term has been popularly though inaccurately applied to structures as diverse as *hill forts* and country houses. Over the approximately 900 years that castles were built they took on a great many forms with many different features, although some, such as *curtain walls* and *arrowslits*, were commonplace.

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Alcázar of Segovia in Spain

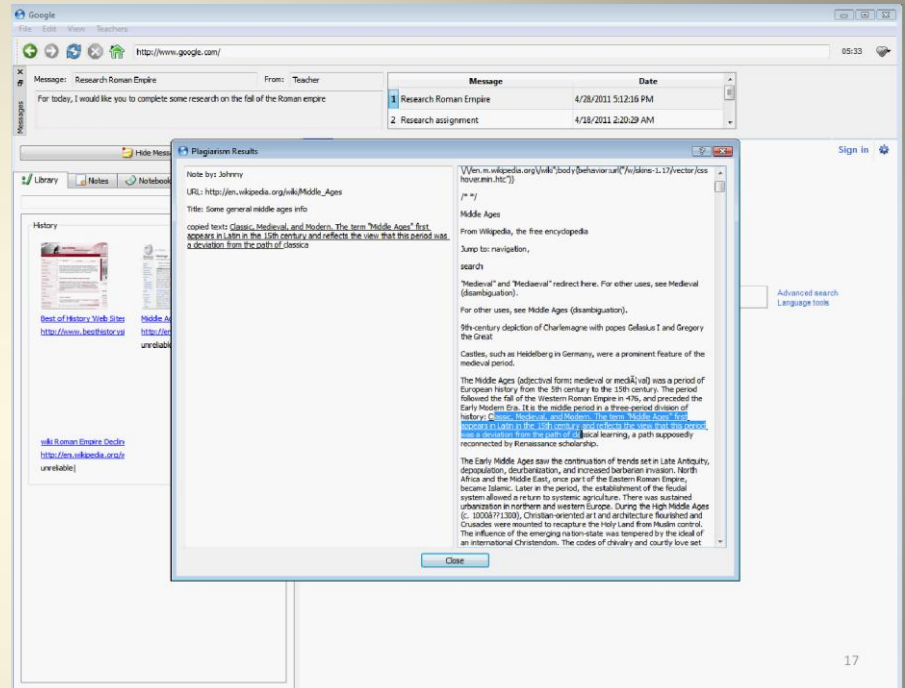


Bodiam Castle in England surrounded by a water-filled moat.



# Plagiarism Checker

- View students notes
- Compare against:
  - History
  - Other user's notes
  - Text file
- Custom settings to fine tune results





http://www.google.com/

04:23

Message: Research Roman Empire From: Teacher

For today, I would like you to complete some research on the fall of the Roman empire

	Message	Date
1	Research Roman Empire	4/28/2011 5:12:16 PM
2	Research assignment	4/18/2011 2:20:29 AM

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Library Notes Notebook

History



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Advanced search  
Language tools

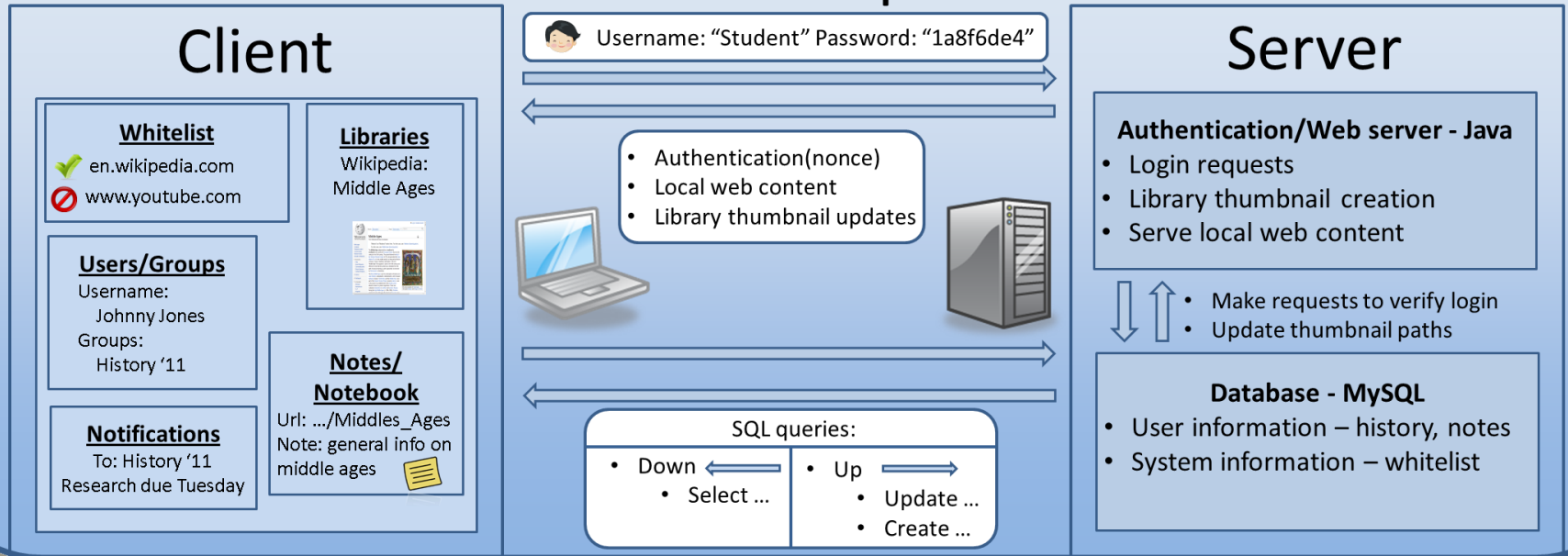
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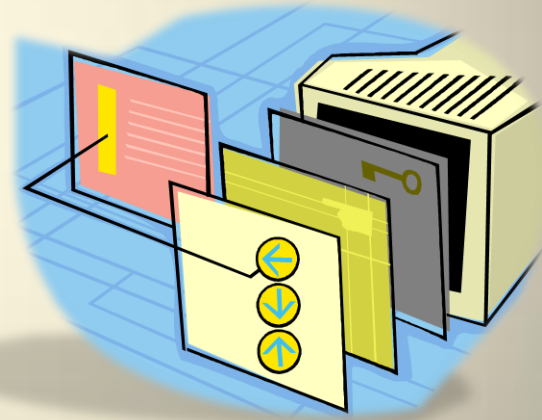
# Design

## Dataflow & Components

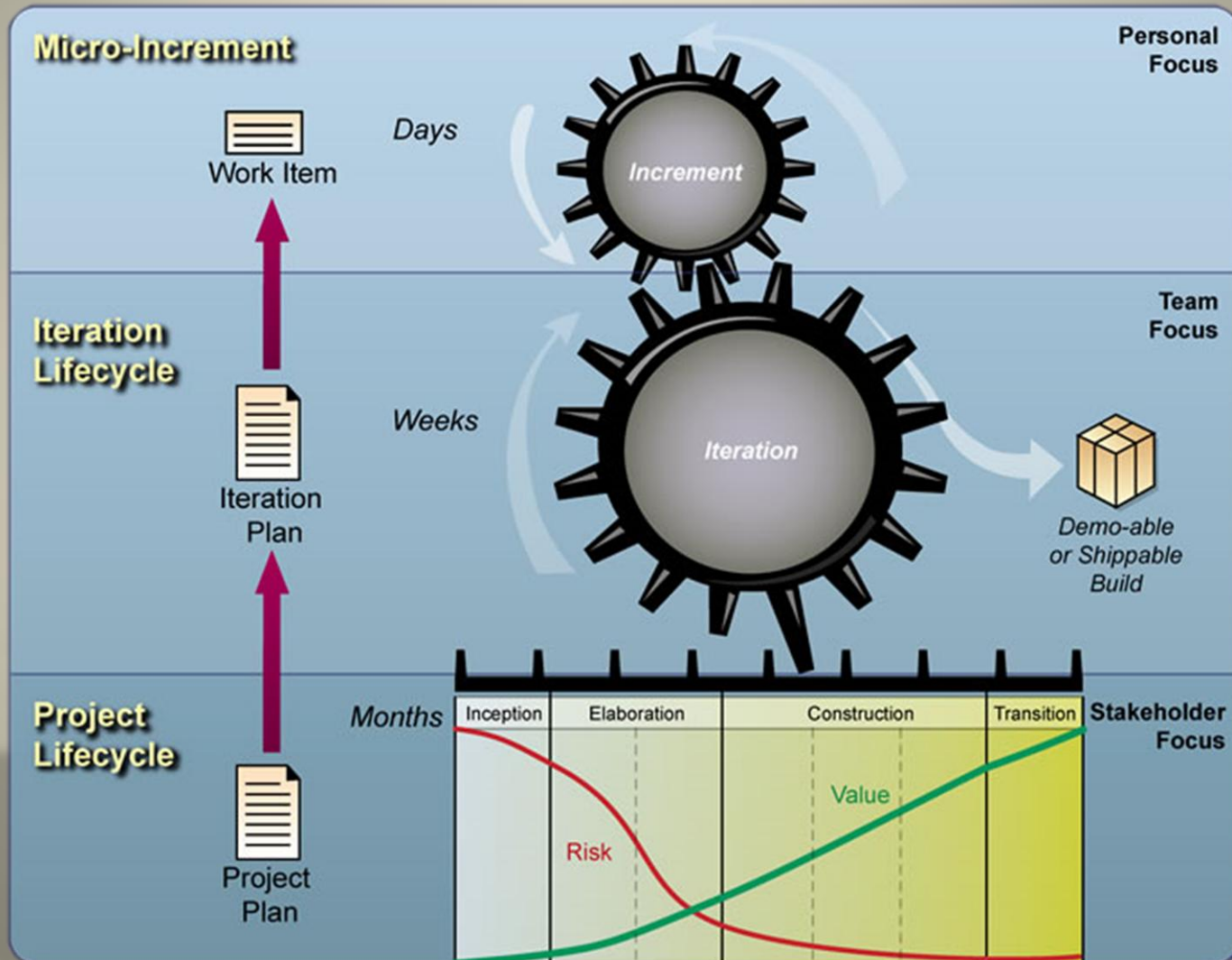


# Tools

- C++ with Qt API
- Java Webserver
- MySQL Database
- Mercurial Subversion



# Design & Development Process



# Challenges



- **Choosing Languages and Tools**
- **Database Connection**
- **Deployment**



# Conclusion

- **Key Features:**
  - Users accounts with persistent notes and history
  - Whitelist controlled browsing and Bookmark Library
- **Statistics**
  - Lines of code : 14,750
  - Commits : 350
  - Classes : 48
- **Educational Tool for classroom internet usage**







Questions?

