

Semester Project Kickoff

CSE 3330/CSE 3345

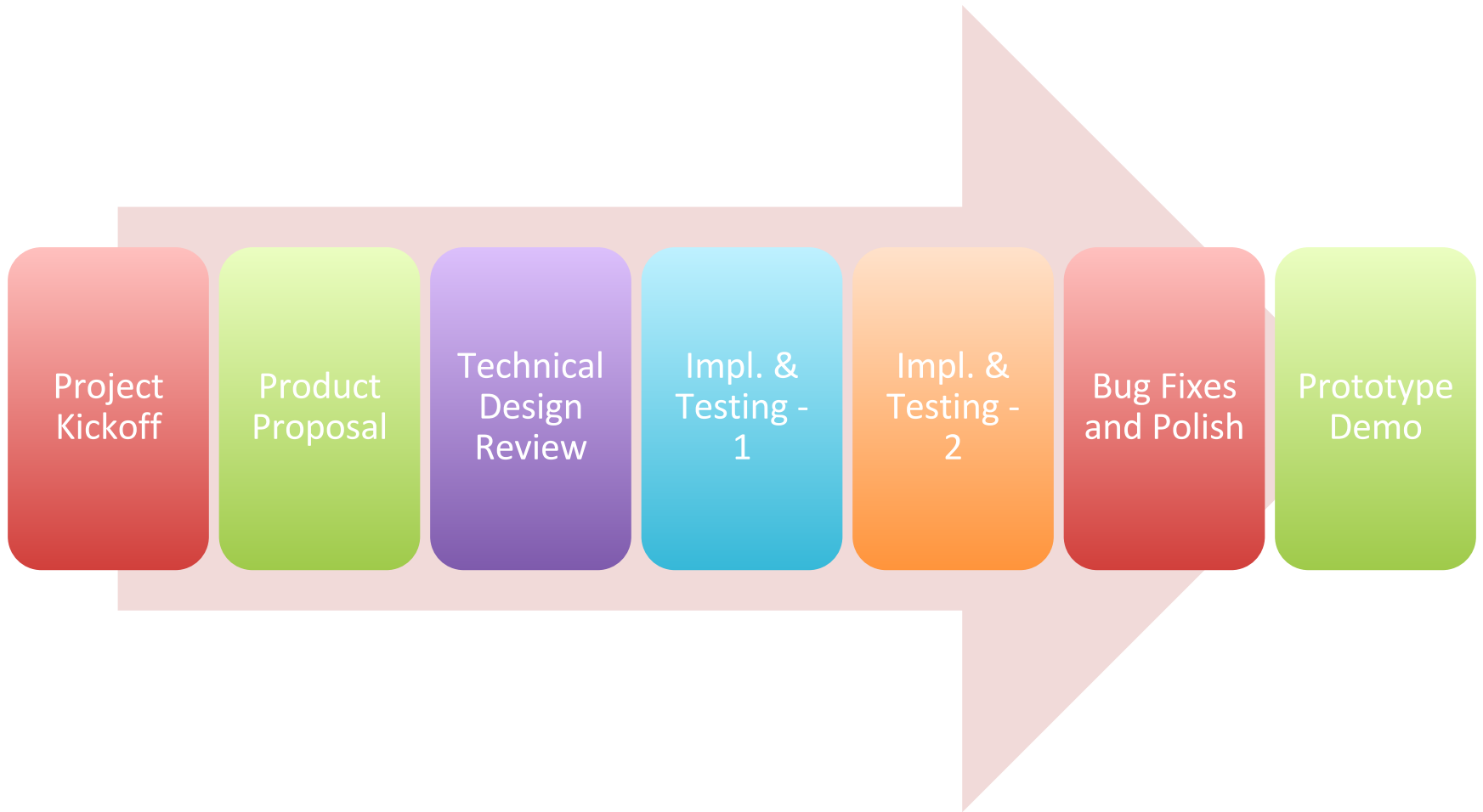
Scenario

- You're part of a startup of college students
- Lots of brainpower
- Little money
- You will:
 - Develop an idea
 - Pitch it
 - Design and implement a prototype

Yes, that's right...

- We choose the teams
- You choose the project

Project Overview



The Product Proposal

- Product Pitch/Elevator Speech
 - Who are you?
 - What's your idea?
 - Who else is in this space and why might you be different?
 - Major features of your product
 - Intended users
- We'll provide feedback on idea and feature set

Technical Design Review

- You'll provide the following:
 - A list of system actors
 - User story summaries and detailed user stories
 - Data model and data model verification
 - User Profiles
 - Object/Action Analysis and Matrix
 - Paper prototypes
 - Usability test plan and report
 - Software Lexicon
- We'll provide feedback on design



Developer

Each developer will

- Will have a full LAMP setup allowing them to host a local database, server, and web client on their machine.
- Pull source code from the GitHub repo to their machine.
- Push source code to GitHub after a code snippet, feature, or bug fix has been implemented and tested.



GitHub will serve as a working repository allowing team developers to share, collaborate and validate each other's code. In addition, GitHub will be used for Bug Tracking, Iteration Feature Sets, and Project Document Hosting.



Amazon EC2 Server

The Amazon EC2 Server will serve as the team's production server. The production server will host code that has been tested and "blessed" by the team's build manager.

****Developers are not to use this for development.****

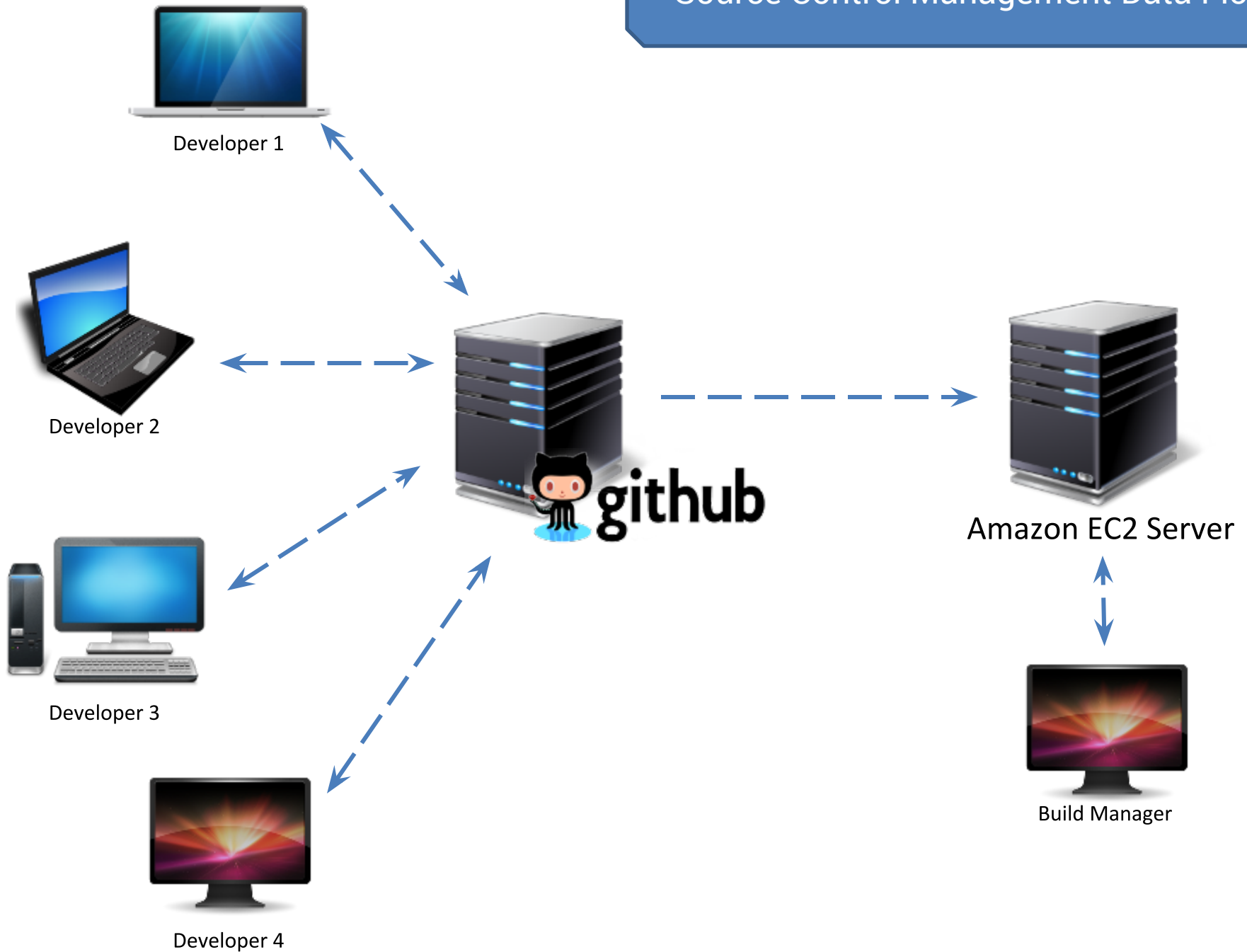


Build Manager

The Build Manager is responsible for

- Giving the final approval on fully tested code from the GitHub repo that is ready for production. This is known as "blessed" code.
- Pulling changes from the GitHub repo to the Amazon EC2 Server.

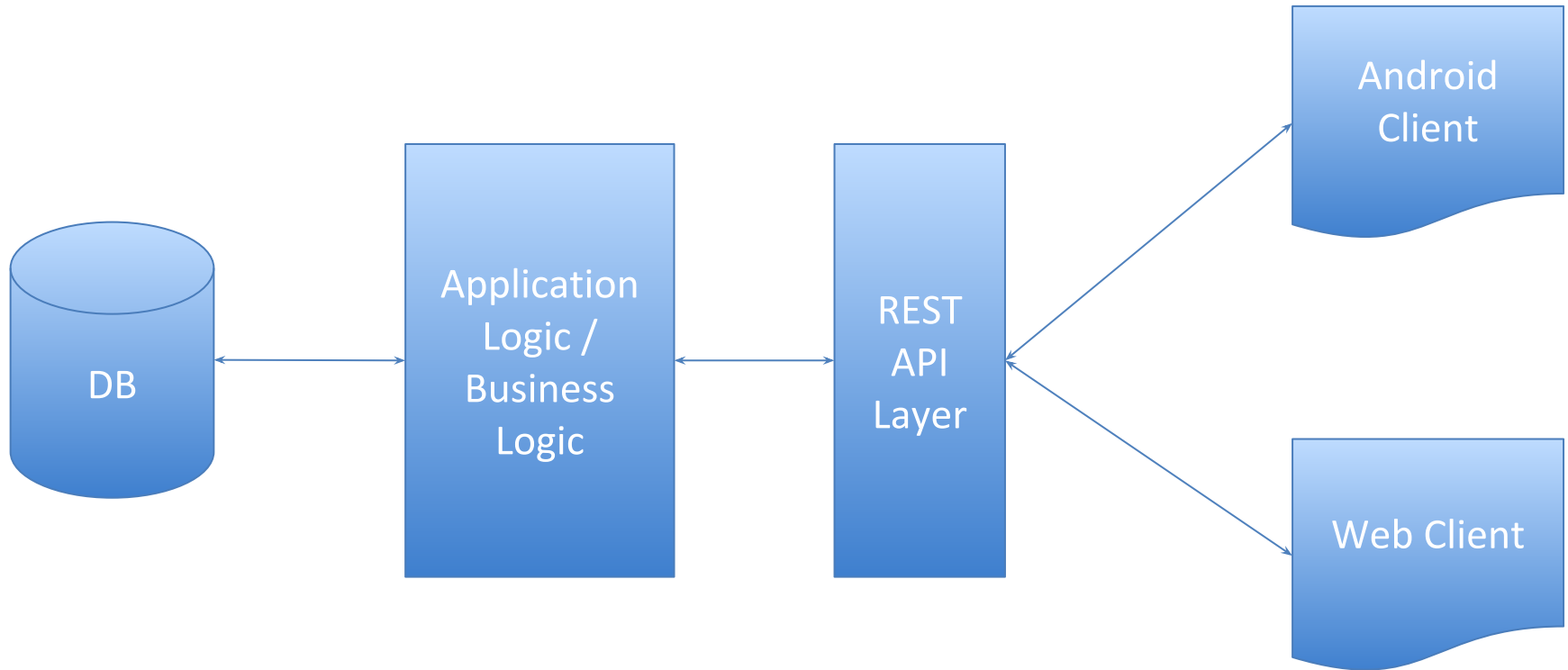
Source Control Management Data Flow



GitHub

- Use a public repository for:
 - Source Control
 - Bug Tracking
 - Iteration Feature Sets / Milestones
 - Project Document Hosting

Architecture



Iterative Development Method

- Plan, Develop, Test
 - 2 Iterations
 - A test team will test the result of your iterations
- Final Iteration with feature freeze
 - bug fixes
 - polishing

Final Submissions

- A final functional prototype
- A final design report
- Present/pitch of your prototype
- Debrief Exercise and Peer Evaluations

Timeline

Date	Activity/Deliverables
September 4, 2014 @ 9:30am	Project Kickoff
September 14, 2014 @ 5:00 – 8:00pm	Product Proposal Presentation with associated documentation
October 2 – October 17, 2014 @ 11:59pm	Mini Collaborative Project Assignment
October 10, 2014 @ 11:59pm	Technical Design Document
October 17, 2014 @ 11:00pm	Iteration 1 Feature Set Plan
October 20 – November 2, 2014	Iteration 1
November 3 – 6, 2014	Testing for Iteration 1
November 7, 2014 @ 11:00pm	Iteration 2 Feature Set Plan
November 10 – 23, 2014	Iteration 2
November 24 – 25, 2014	Testing for Iteration 2
November 30 – December 5, 2014	Iteration 3 (Feature Freeze - no new features are to be implemented; therefore, no iteration feature set plan is required.)
December 12, 2014 @ 8:00 – 11:00am	Final Project Presentation and Report Due with Completed Prototype.

Additional Items

- You can't use Bootstrap, Foundation, Ink or similar projects.

Tips for Success

- Be Bold
- Be Professional
- Be Brief
- Be Engaged

Project Evaluation

Deliverable/Milestone	Percentage
Product Proposal	5%
Technical Design Document	15%
Iteration Submissions	10%
Final Submission	20%
Individual Contribution	20%
Individual Git Commit Activity and Productivity	20%
RESTful API (DB)	10%
User Experience / UI Aesthetic (GUI)	10%

Caveat Lector: There is a world of difference between a good product and a great product. Unfortunately, it is nearly impossible to objectively define what separates good from great; we all just know it when we see it. Therefore, a good project will receive a maximum grade of B overall for each team member. Members of teams producing a great project will be eligible for an A.

Top 10 things teams wish they did sooner last year

1. Start early, and work hard throughout. Specifically, get the parts that look the most challenging finished first, so you'll solve the important problems first.
2. Meet weekly as a group preferably in person (or via Skype/Google Hangout). Plan group sessions early and often. The longer you wait the more you'll regret it.
3. Collectively make a decision as a group and know when to compromise. Not everyone is going to get their way.
4. Need to learn and love Git. Check in early and often to avoid Merging nightmares.
5. Make small, short, and specific tasks rather than large and long tasks.

Top 10 things teams wish they did sooner last year

6. I would make sure tasks that needed to be done (i.e. features that needed to be implemented) were planned out better ahead of time to know who was doing what and when.
7. I constantly put off working on the project because of other class deadlines and this severely jeopardized the project.
8. Not communicating with other team members or making them aware of people's tasks. Numerous times people redid the same work because no one knew someone else had already done it.
9. Tell your friends you'll see them later.
10. If someone isn't pulling their weight you need to address the problem early and fix it.

Team Dynamics

- Contributions to the Git repository
- Peer evaluations
- Team member grievance process

QUESTIONS?