Musical Reporting Box
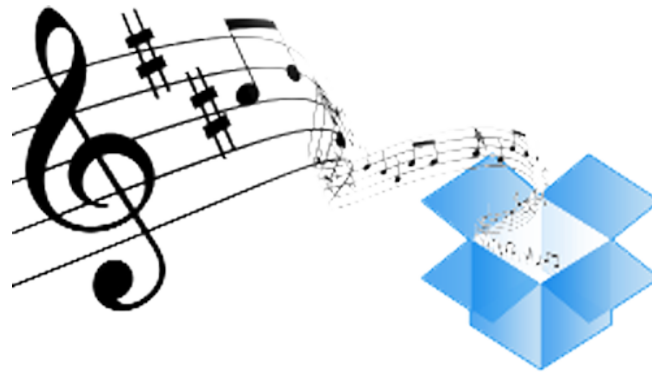## Functionality Presentation

Presented By:
Jordan Knopp, Jeff Korn, Yassine Elouri, Steve Yoss

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Presentation Agenda

This presentation will include:

1. Overview of the Project

2. Project Deliverables & Features

3. Project Development Process

4. Demonstration

   a. Backend Development
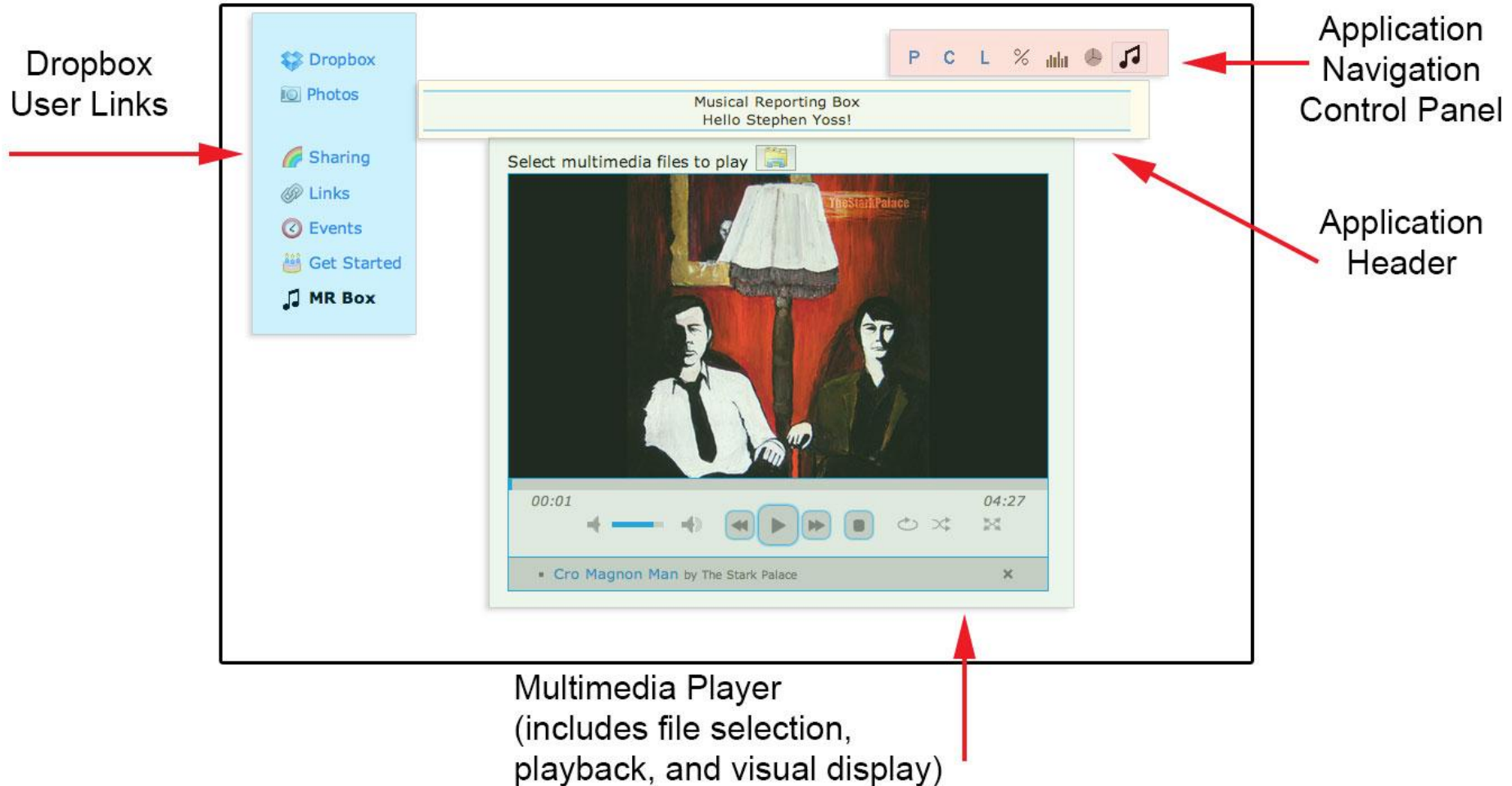
   b. User Interface Design & Operation

5. Conclusion

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Project Deliverables & Features

Three Main Components of Functionality:

1. Dropbox Integration

2. Multimedia Presentation

3. Graphical Reporting Tools

Multimedia Display & Playback

Dropbox User Links

Application Navigation Control Panel
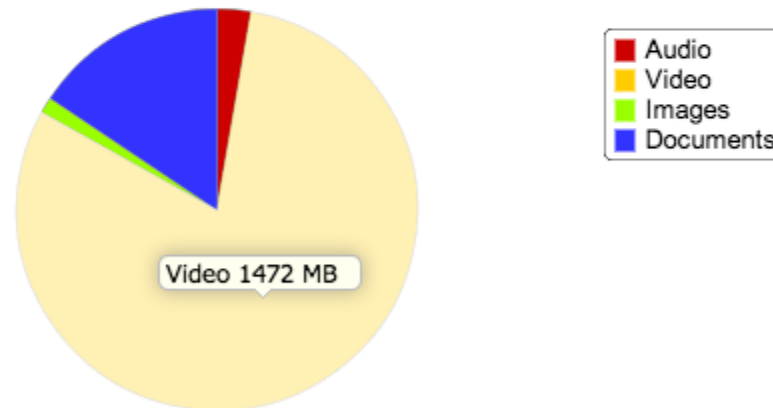
Application Header

Multimedia Player (includes file selection, playback, and visual display)

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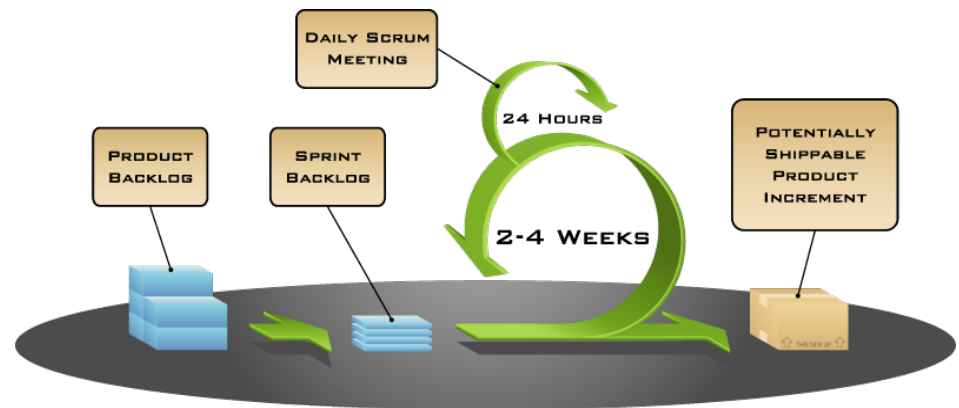
Dropbox Reporting

When the user selects the pie chart icon they are presented a pie chart graph that displays an allocation of their account by file type.

Project Development Process

What was the higher level process followed by this project?

- Scrum / Rational Unified Process - *Planned*

  - Discovery
  - Elaboration
  - Production
  - Quality Assurance
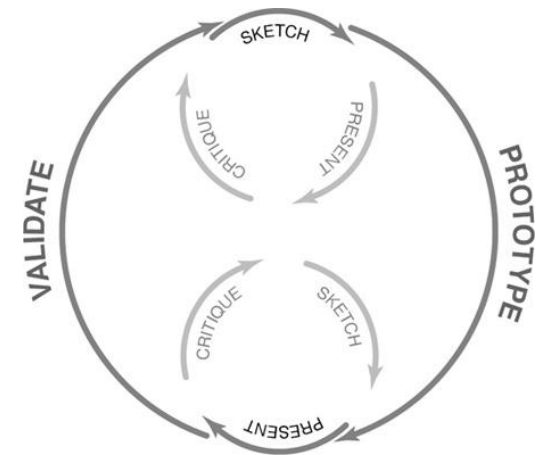 - Document

Project Development Process

What process was implemented?

- Agile Scrum Methodology
  - Scrum / Status Meeting Hybrid (Two times per wk)
  - Two week iterations

- Pair Programming
  - Development sessions
  - Email / WebEx / Meetings

- Lean UX Development Process

Project Development Process

What process was implemented?

- So, what is Lean UX?

  ○ Pairing of User Experience (UX) architects and web developers to produce workable code at the end of iterations

  ○ Quick Design, quick execution

  ○ Limited to no documentation

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Project Development Process

What process was implemented?

- QA Testing Scripts
  - Unit Tests - *Moderate*
  - System Integration - *Extensive*
  - User Acceptance Test (UAT) - *Limited*
  - Usability Testing - *Limited*

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Project Development Process

What tools were used during the project?

- Issue and Bug Tracking - Jazz Hub

- Document Center (Wiki) - GITHub

- Graphic Design / UX Design - GIMP, Visio, PPT

- Dev Environment / Content Repo - Dropbox

- Production Environment - LAMP Environment

- Communication - WebEx, Skype, Email

- Documentation - Google Drive, Office

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Project Development Process

How effective was the process?

- **Opportunities That Worked Well**
  - Efficient tracking of planned stories in Jazz Hub
  - CSS and HTML5 scripts used for easier code creation
  - Dropbox API integration effective for file selection and RGraph reporting
  - "Good enough" philosophy used to meet dev goals
  - Lean UX and efficient QA made project agile

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Project Development Process
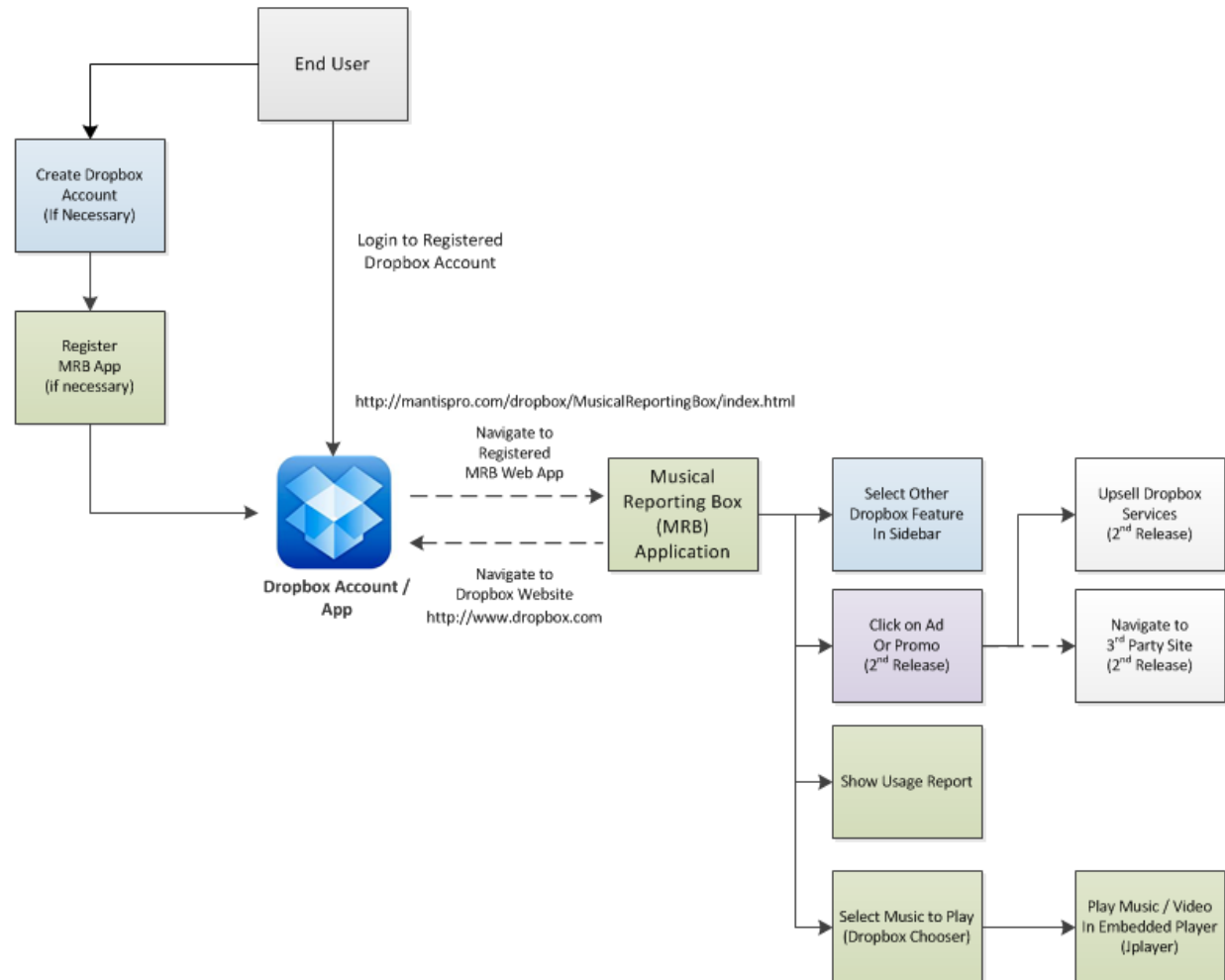
How effective was the process?

- **Opportunities for Improvement:**
  - Product changes not always tracked in Jazz Hub
  - Environment changes necessary, but required reworking
  - Planning and structure impeded by schedules of team members
  - Communication about project goals and milestones could have been more clear

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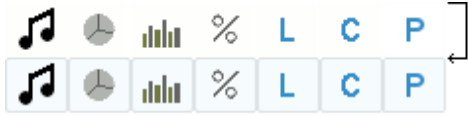
Project Development Process

What is the system design?

This diagram illustrates the workflow of the application.

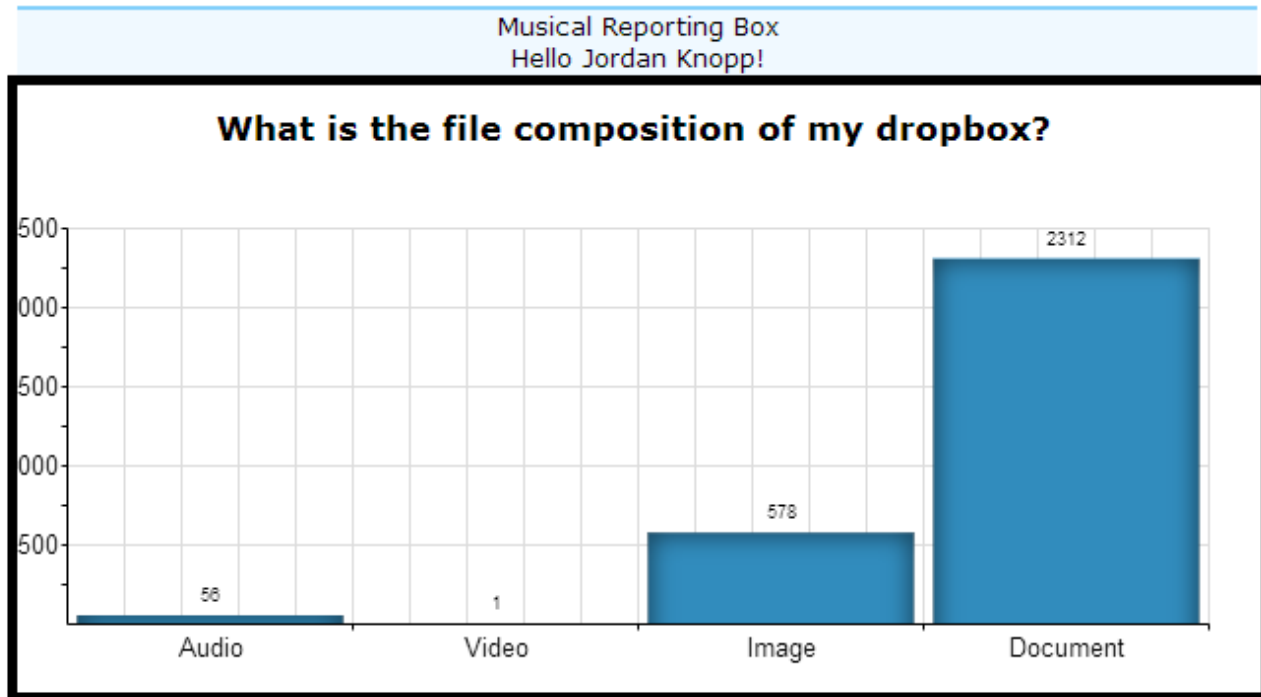Musical Reporting Box Design (Final)

Project Development Process

Project Development Process

Javascript and Asynchronous Programming

```javascript
// STORAGE ANALYSIS
function getData(path) {
    var stat;
    var contentStat = [];
    client.stat(path, {readDir: true, Number: 25000}, function(error, stat, contentStat) {
        for(var i = 0; i < contentStat.length; i++) {
            if(contentStat[i].isFolder) {
                getData(contentStat[i].path);
            } else {
                stats.push(contentStat[i]);
            }
        }
    });
}
```

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Project Demonstration

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Questions?
Comments?

Thank you!

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