

Mastering Source Control in Xcode 4

Session 311

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Software Engineer, Xcode

These are confidential sessions—please refrain from streaming, blogging, or taking pictures

Agenda

- Introduction
- Sharing your code
- Using branches effectively

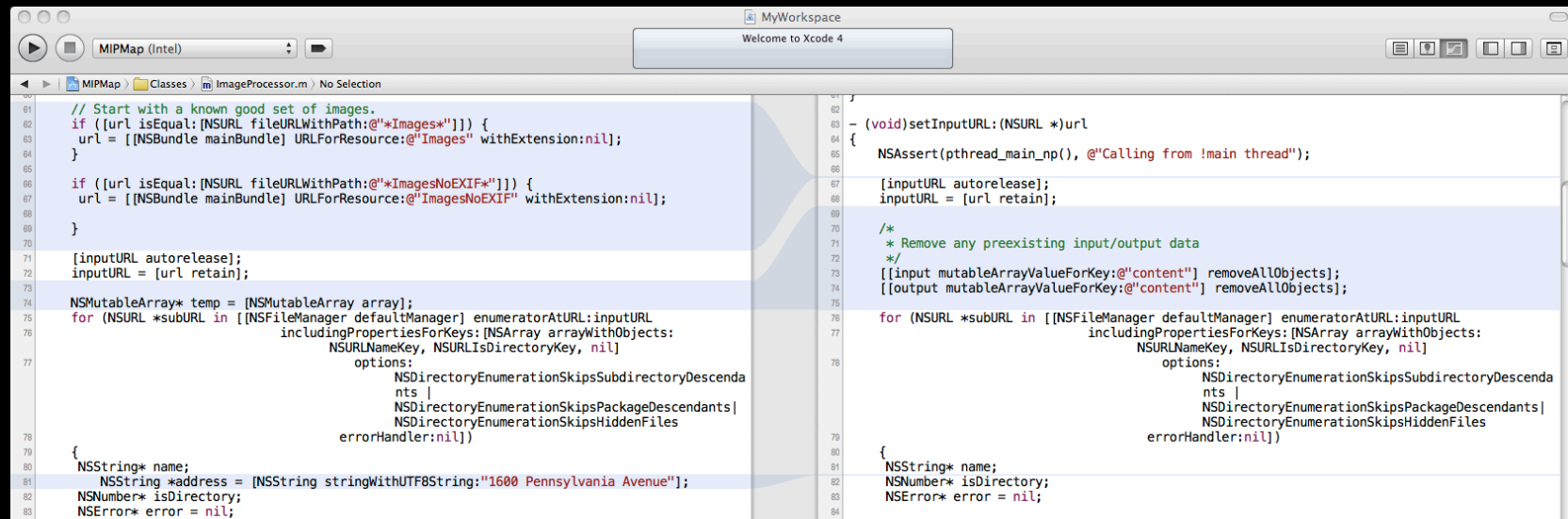
Introduction

- Editing
- Committing changes
- Viewing history
- Managing repositories

Demo

Summary

- Edit
- Commit changes
- View history
- Manage repositories



```
MyWorkspace
Welcome to Xcode 4

MIPMap (Intel)
MIPMap > Classes > ImageProcessor.m No Selection

61 // Start with a known good set of images.
62 if ([url isEqual:[NSURL fileURLWithPath:@"*Images*"]]) {
63     url = [[NSBundle mainBundle] URLForResource:@"Images" withExtension:nil];
64 }
65
66 if ([url isEqual:[NSURL fileURLWithPath:@"*ImagesNoEXIF*"]]) {
67     url = [[NSBundle mainBundle] URLForResource:@"ImagesNoEXIF" withExtension:nil];
68 }
69
70 [inputURL autorelease];
71 inputURL = [url retain];
72
73 NSMutableArray* temp = [NSMutableArray array];
74 for (NSURL *subURL in [[NSFileManager defaultManager] enumeratorAtURL:inputURL
75     includingPropertiesForKeys:[NSArray arrayWithObjects:
76         NSURLNameKey, NSURLIsDirectoryKey, nil]
77     options:
78         NSDirectoryEnumerationSkipsSubdirectoryDescendants
79         |
80         NSDirectoryEnumerationSkipsPackageDescendants|
81         NSDirectoryEnumerationSkipsHiddenFiles
82     errorHandler:nil])
83 {
84     NSString* name;
85     NSString *address = [NSString stringWithUTF8String:"1600 Pennsylvania Avenue"];
86     NSNumber* isDirectory;
87     NSError* error = nil;
88
89 }
90
91 }
92
93 - (void)setInputURL:(NSURL *)url
94 {
95     NSAssert(pthread_main_np(), @"Calling from !main thread");
96
97     [inputURL autorelease];
98     inputURL = [url retain];
99
100     /*
101     * Remove any preexisting input/output data
102     */
103     [[input mutableArrayValueForKey:@"content"] removeAllObjects];
104     [[output mutableArrayValueForKey:@"content"] removeAllObjects];
105
106     for (NSURL *subURL in [[NSFileManager defaultManager] enumeratorAtURL:inputURL
107         includingPropertiesForKeys:[NSArray arrayWithObjects:
108             NSURLNameKey, NSURLIsDirectoryKey, nil]
109         options:
110             NSDirectoryEnumerationSkipsSubdirectoryDescendants
111             |
112             NSDirectoryEnumerationSkipsPackageDescendants|
113             NSDirectoryEnumerationSkipsHiddenFiles
114         errorHandler:nil])
115     {
116         NSString* name;
117         NSNumber* isDirectory;
118         NSError* error = nil;
119
120     }
121
122 }
```

Sharing Your Code

Kevin Lindeman
Software Engineer, Xcode

Sharing Your Code

- Creating new projects using source control
- Configuring remotes
- Pushing changes

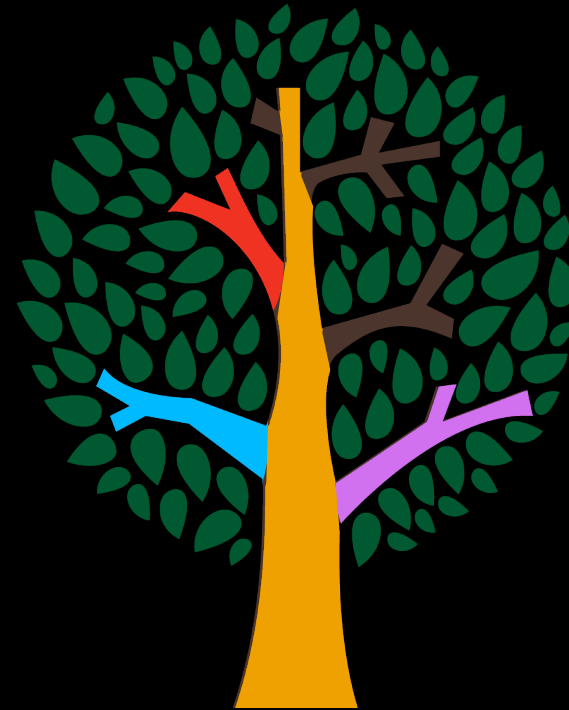


Demo

Branching and Merging

Branches Are Great!

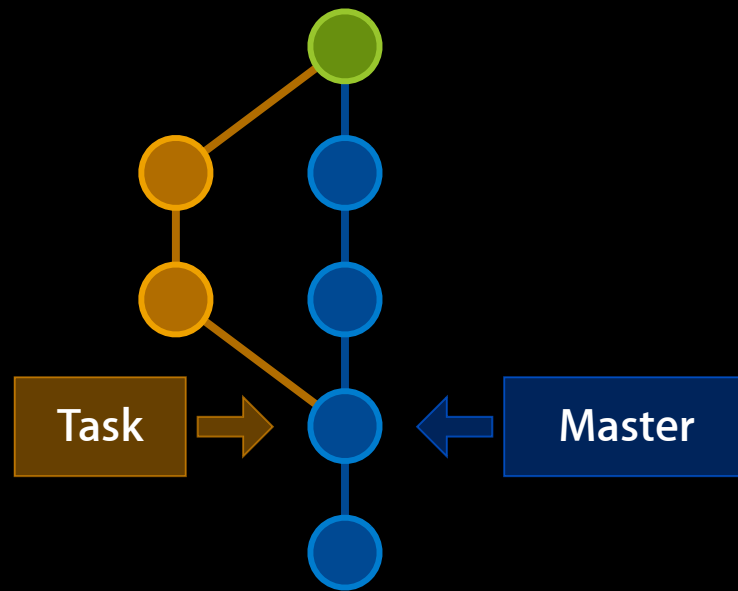
- Trunk
- Bug fix
- Task
- Release



Branches Are Great!

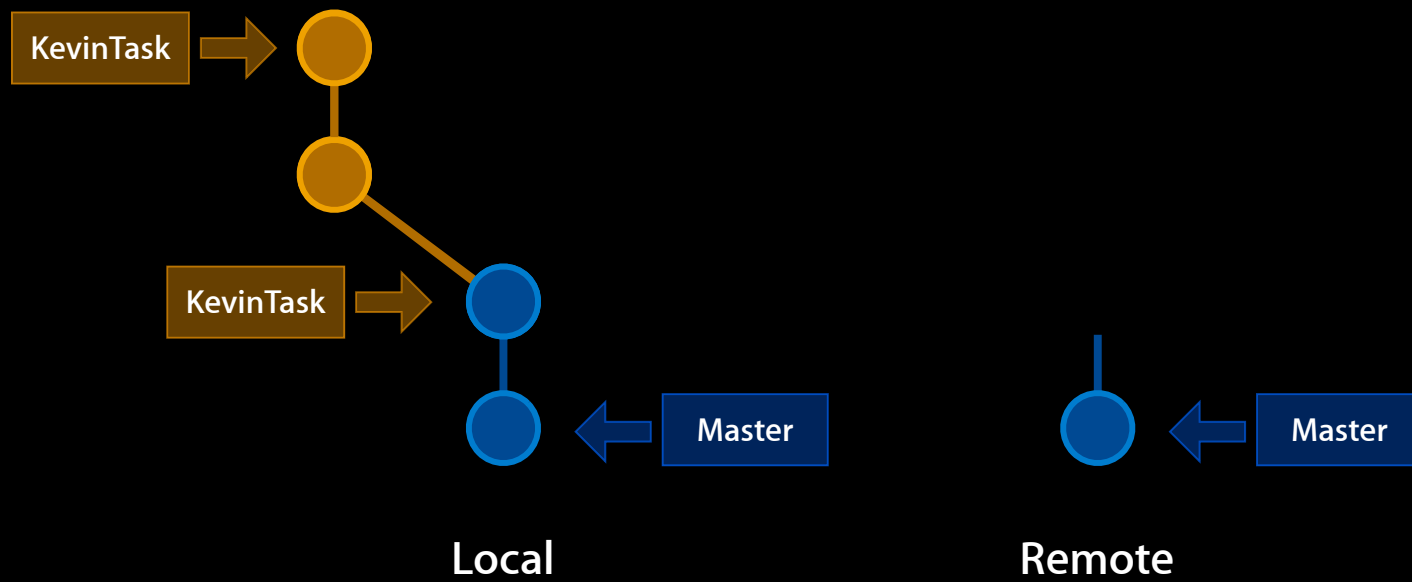
- Isolate changes
- Reduce regressions
- Simplify code reviews

Anatomy of a Task Branch



Branching and Merging

- Creating branches
- Switching
- Merging



Demo

Summary

- Create new projects using source control
- Share your code
- How to use branches

Sharing Your Code

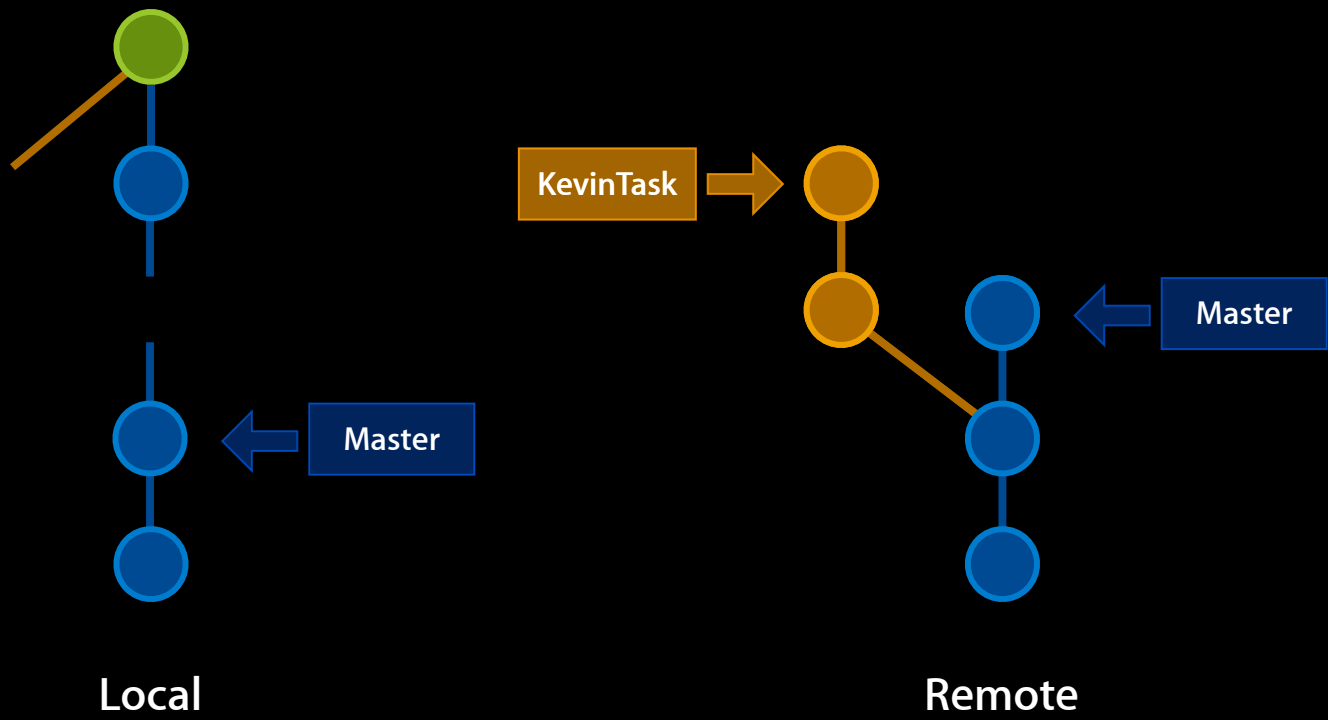
Resolving conflicts

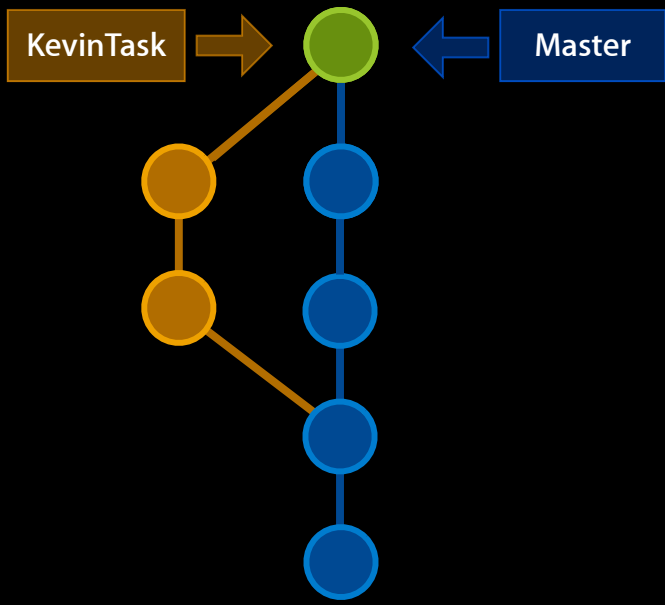
Kerry Hazelgren

Software Engineering Manager, Xcode

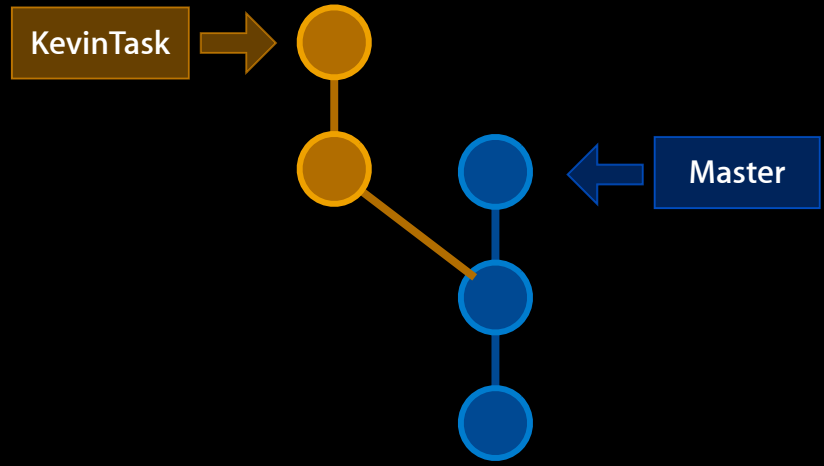
Sharing Your Code

- Creating a tracking branch
- Resolving conflicts
- Sharing the final result





Local



Remote

Demo

Summary

- Create a tracking branch
- Resolve conflicts
- Share the final result

Conclusion

- Source control that works with you
- Easily share code with others
- Isolate changes using branches
- Eliminate conflicts before they happen

More Information

Michael Jurewitz

Developer Tools and Performance Evangelist
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Apple Developer Forums

<http://devforums.apple.com>

Labs

Xcode for iOS Development Lab

Developer Tools Lab A
Wednesday 4:30PM

Xcode 4 Lab

Developer Tools Lab A
Thursday 11:30AM

