



OpenEyes - Collaborative Development

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Target Audience

General Interest	✓
Healthcare managers	✓
Ophthalmologists	✓
Developers	✓

Amendment Record

Issue	Description	Author	Date
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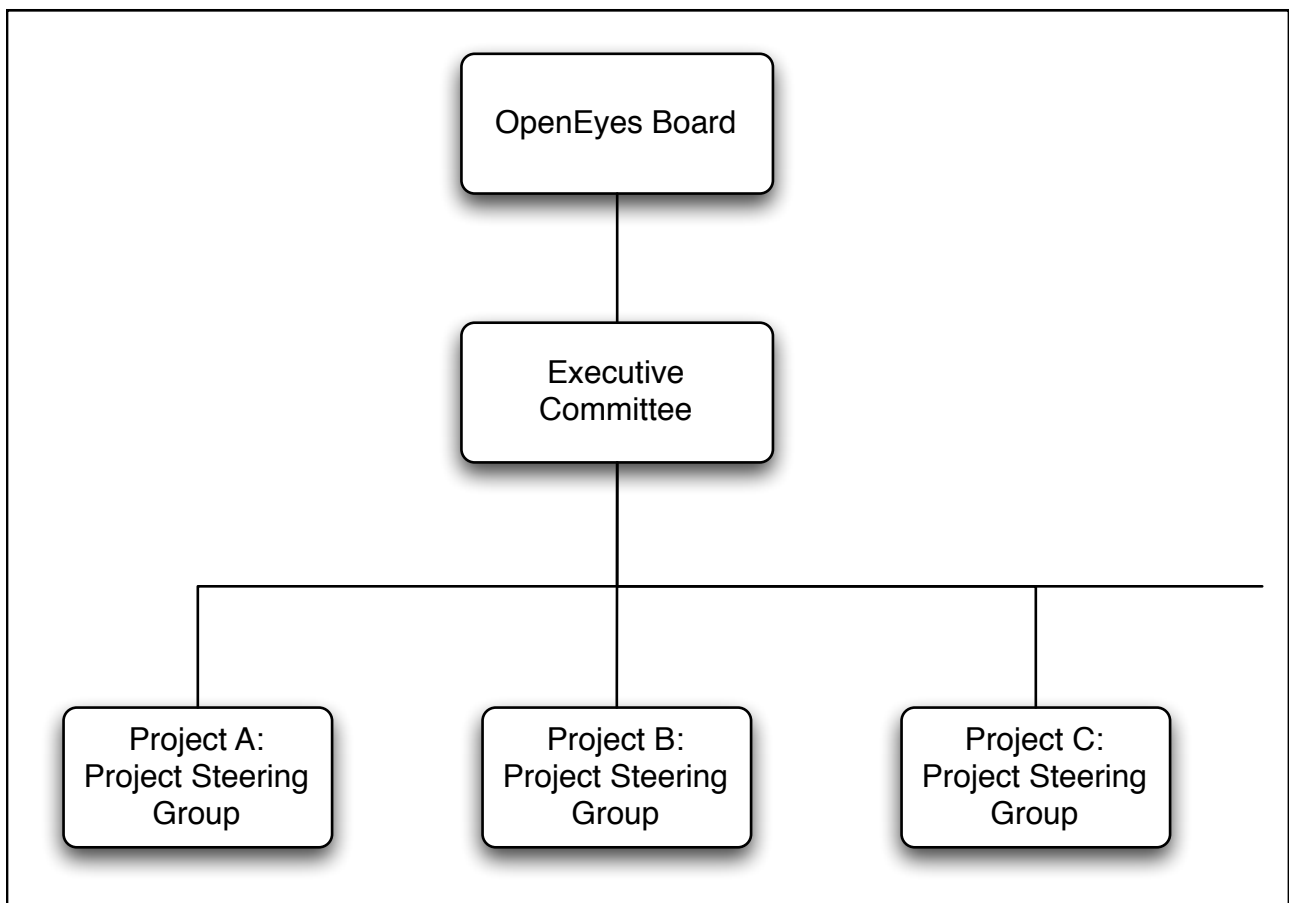
Introduction

A significant advantage of the Open Source nature of OpenEyes, is that it allows collaborative development, with sharing of the best ideas and rapid addition of functions, that in a commercial environment tend to take years to appear. However, the distributed nature of the development effort gives rise to its own problems, including coordination of effort, avoidance of duplication, avoidance of fragmentation and ‘forking’, and consistency of the user experience.

This document describes the structures and processes that OpenEyes uses to enhance collaborative development, and control the risks.

Governance

The overall governance of the project is the responsibility of the OpenEyes Foundation (OEF).¹ The OEF has set up a number of steering groups with specific development tasks (see figure). Each steering group will usually correspond to a sub-specialty within Medicine. Each steering group is led by a clinician, and is made up of a number of clinical and technical members ideally representative of the full range of clinical environments in which OpenEyes will be used.





Development Resources

By definition, the representative nature of each steering group means that physical meetings of the members will rarely be possible. To address this, the OEF provides the following facilities to assist with development.

Website


The OpenEyes website has a documentation section which contains up to date copies of all the relevant OpenEyes documentation.

List servers

Each steering group has access to an email list server, which allows email discussion of development issues using a single email address. Discussions are also archived for future reference.

Prototyping

The OpenEyes website also has a Development section, in which interface concepts and prototype elements can be displayed. This includes screen shots, interface ideas, and working interface elements as shown in the following example;


OpenEyes an open source electronic patient record

Home	News	Screenshots	Documentation	Contributors	Development	Contact us
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Exophthalmometry element

Description:
This element allows data entry from measurements made with the Hertel exophthalmometer. In edit mode, the numeric data is linked to the diagrammatic scheme on the right hand side. Data can be entered either by typing the numbers into the text boxes, or by using the mouse to manipulate the eyes in the diagram. The data and the diagram are linked so that changes in one are reflected in the other in real time.

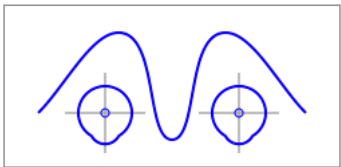
Status: Alpha

Edit mode:

100

20

20

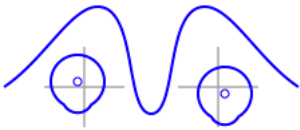


Display mode:

110

16

25



Steering Group:
Adnexal

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Central Development Office

The OEF central development office provides a central resource to the project, including UX (user experience) advice. The overall 'look and feel' of OpenEyes software and its modules is a key responsibility of the central office.

Development Pathway

The following sequence illustrates a typical development pathway for a OpenEyes module.

1. Steering group established by OEF, with appointment of clinical lead
2. Clinical lead recruits representative clinicians to group
3. Steering group produces draft Interface and functional specification
4. Development team (local or central) creates prototypes for display on the OE website
5. Trial and discussion of ideas with email or physical meetings
6. Iterative process involving 3-5 until steering group sign off
7. Module submitted by steering group to OEF for approval, testing, and quality assurance
8. Integration of module by core development team
9. Release of module

References

1. Aylward GW. OpenEyes - Governance. OpenEyes Foundation 2011.
2. Aylward GW. OpenEyes - Clinical Event Design. OpenEyes Foundation 2011.