

# Developer Space (D-Space)

Work in Progress...

 Developer Space is one of the main functions of the Prosperity 4 All platform.

## Use Case/ Scenarios

To find the D-Space use cases/ Scenarios please refer to the GPII Wiki: [http://wiki.gpii.net/index.php/Developer\\_Space](http://wiki.gpii.net/index.php/Developer_Space)

## Comparative Analysis

The following analysis provides an overview of two different types of services that developers may use in their product development workflow:

1. Closed Developer Platforms: They encourage developers using their products by offering variety of tools and services e.g. Apple, Microsoft, Google
2. Open Developer Tools: They provide developers with tools, services and information to facilitate their workflow e.g. GitHub, CodeClimate

This analysis aims to reveal the components that must be incorporated within the D-Space as well as unique features to created added value for the D-Space

### 1. Closed Developer Platforms

Platform	Tools	Resources	Marketing/ Promotions	Community	Mentorship	Business Model
Google Developers	<ul style="list-style-type: none"> <li>• Cloud credits to help developers build products  (Can we offer such credits or initial incentives?)</li> <li>• Early access to pre-release APIs and SDKs</li> </ul>	<ul style="list-style-type: none"> <li>• Mix of Free/Paid Online courses both for the development and design</li> <li>• Featured talks and articles for design, development, distribution and monetizing  (Training modules to help developers market and sell their products)</li> </ul>	<ul style="list-style-type: none"> <li>• Spotlight: Featured startups are shown here (first hand lessons, challenges and tactics)  (Featuring developer of the month gives them an incentive to participate and build products, etc)</li> </ul>	<ul style="list-style-type: none"> <li>• Getting invited to the startup launch events around the world</li> <li>• Week-long bootcamps for early stage startups (Focused on the subject, Business oriented, practical tips, marketing and presentation skills)  (Interesting but maybe out of scope for P4A)</li> </ul>	<ul style="list-style-type: none"> <li>• Mentorship from Startup Launch mentor network</li> <li>• UX reviews by Google Developer Relations and Startup Launch mentor for selected startup</li> </ul>	

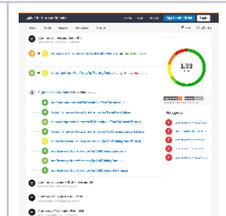
<p><b>Mozilla Developer Network</b></p>	<ul style="list-style-type: none"> <li>Libraries and APIs</li> <li>Web Console</li> <li>JS Debugger</li> <li>Page Inspector</li> <li>Style Editor</li> <li>Profiler</li> <li>Network Monitor</li> <li>App manager</li> <li>Simulator</li> <li>Remote Debugging</li> <li>Responsive Design View (This feature can be useful for designers as well)</li> <li>Settings</li> </ul>	<ul style="list-style-type: none"> <li>Layout Basics</li> <li>Styleguides</li> <li>Design Asset Library (A link to asset libraries for different platforms)</li> <li>Components guides</li> <li>Publishing and Monetization guides</li> <li>Developer Guide (CSS, Graphics, Web APIs, HTML, XML, SVG, UX, etc.)</li> <li>Accessibility</li> <li>Security</li> <li>Demos</li> </ul>	<ul style="list-style-type: none"> <li>Featured Demos (Showcasing selected products not just on the D-Space, but on the entire platform)</li> </ul>	<ul style="list-style-type: none"> <li>Hacks Blog</li> <li>Feedback channels in Stack Overflow</li> <li>Members can edit documentations and showcase their work</li> <li>Contributors receive Mozilla gear, invitation to Mozilla related events and considered for internships</li> </ul>	<ul style="list-style-type: none"> <li>TestDay: Global, virtual events to test a particular product or feature. Meant to teach people the skills necessary to contribute to Mozilla (Maybe every month a particular product is selected for testing, and review by the community)</li> </ul>	<ul style="list-style-type: none"> <li>All parts are created by an open community of developers. All services are free (You can find several pages that are not reviewed or completed)</li> <li>Sustained through donations</li> </ul>
<p><b>Apple Developers</b></p>	<ul style="list-style-type: none"> <li>SDKs</li> <li>Programs certificates (Xcode) (Offering certificate for commonly used programs)</li> <li>Programming language (Swift)</li> <li>TestFlight Beta Testing (Inviting internal &amp; External testers)</li> <li>Review and Follow Guidelines after submission to App Store</li> <li>Bug Reporter</li> </ul>	<ul style="list-style-type: none"> <li>iCloud Design Guide</li> <li>iOS &amp; OS developer library (Guides, References, Release Notes, Sample Code, Technical Code)</li> <li>Apple Capabilities guidelines and Framework Reference (WatchKit, Touch ID, Apple Pay, etc.)</li> <li>Videos from Apple Worldwide Developers Conference</li> <li>iOS &amp; OS videos</li> <li>Tech Talks</li> </ul>		<ul style="list-style-type: none"> <li>Developer Forums (Paid Service)</li> <li>Annual Worldwide Developers Conference</li> </ul>		<ul style="list-style-type: none"> <li>Subscription fee for technical support &amp; resources and access to pre-release software</li> </ul>

<p><b>Microsoft Developers Network</b></p>	<ul style="list-style-type: none"> <li>Free Cloud Services</li> <li>APIs and SDKs</li> <li>Visual Studio</li> </ul>	<ul style="list-style-type: none"> <li>Documentations for APIs and other references</li> <li>Developer Code Sample</li> <li>MSDN Library (Design &amp; Development Tools and Languages, Mobile/Web /Office/Windows Development)</li> </ul>	<ul style="list-style-type: none"> <li>Customer Access Program: Connecting promising startups with mature ideas to the Microsoft's global customers  (Matching Products/Developers with an idea to the right backers, or customers)</li> </ul>	<ul style="list-style-type: none"> <li>Local Innovation Centers to provide resources and support for students, entrepreneurs and startups (Low or No cost training)  (Interesting but maybe out of scope for P4A)</li> <li>Microsoft Virtual Academy (Courses, Live Events, Top students) </li> <li>Channel 9: featured videos, interviews and talks</li> <li>Imagine Cup: Global Students Technology Competition  (For issues/ideas/questions that are raised by many P4A users)</li> <li>Developer Blogs and Forums</li> </ul>	<ul style="list-style-type: none"> <li>Accelerators: for promising early-stage startups and first time entrepreneurs (3-6 Month mentoring/ technical guidance and connection to other startups)</li> <li>Local Tech Advisers </li> <li>Know it Prove it: a month long challenge to improve your skill and complete a set of required modules  (Leveling up your skills and turning consumers to producers)</li> </ul>	<ul style="list-style-type: none"> <li>Subscription fee for some of the services</li> </ul>
<p><b>Amazon Developers</b></p>	<ul style="list-style-type: none"> <li>SDK Download</li> <li>App Testing (simple drag and drop)</li> <li>Live App Testing (App distribution in the app store prior to release to be tested by Amazon Testers)</li> <li>A/B Testing on the fly  (Useful tool for startups and entrepreneurs)</li> </ul>	<ul style="list-style-type: none"> <li>Learning Center (videos, documentations, case studies)</li> <li>Marketing tips (Distribution, Traffic, Trademarks) </li> </ul>	<ul style="list-style-type: none"> <li>Amazon Coins Rewards to Customer to Improve Conversion</li> <li>Enhanced merchandising to improve discovery</li> <li>Free App of the Day (Featured merchandising)</li> <li>Developer Promotion Console (Increasing sales, monitoring results, controlling pricing options)  (It's very interesting but I don't know how it can be used in the D-Space)</li> </ul>	<ul style="list-style-type: none"> <li>Events and Webinars</li> <li>Amazon Blog</li> <li>Amazon Forum</li> </ul>	<ul style="list-style-type: none"> <li>Amazon Developer Evangelist  (Based on the developer's acquired badges, reviews and participation level, s/he can be nominated as an evangelist)</li> </ul>	

## 2. Developer Tools

### Code Climate: Automated code review for Ruby, JS, and PHP.

- Multiple ways of quickly understanding the state of code at a glance
- Uses many visuals to convey status:
  - "A" to "F" scale to indicate the grade of a particular item
  - Up and down icons to indicate when something has improved or declined
  - "Hotspot" sidebar widget to show where important trouble spots are e.g. <https://codeclimate.com/tour/feed>
  - In **dashboard view**, security issues are called out for easy viewing.
- Notifications for when status changes.
- Project Feed to monitor any changes on the code base
- Dashboard** enables users to see multiple projects state at a glance
- Easy Toggle** between test coverage and code quality
- List of all features**



**JS Hint:** Scanning programs written in JavaScript to report commonly made mistakes and potential bugs e.g. syntax error, a bug due to implicit type conversion, a leaking variable.

- There is a sidebar which summarizes the code and identifies possible issues. As you hover over the identified issues, the related piece of code is highlighted.



**Travis-Ci:** Continues integration service used to build and test projects hosted at GitHub.

- Uses visuals to convey status:
  - Badges to show if the build is failing, passing, unknown or if there is an error
  - The items on the build history, pull requests and branch summaries lists are labeled to show the status of the pulled requests (started, passed, failed)
- Easy option to download log



**Bit Bucket:** Private Code Repositories to host, manage and share Git and Mercurial repositories in the cloud.

- Repositories can be shared with team members
- Quick options to Merge, Decline or Approve changes
- Commits are interlinked with JIRA and can be resolved from the Bitbucket
- Capability to track your activity as well as your teammates



**Google Code:** Runs a project hosting service that provides revision control, an issue tracker, and a wiki for documentation.

- It has the following 3 sections:
  - Project home: project info, features, members, links
  - Wiki: documentations, comments, change logs
  - Source: Browse (branches, tags, etc), Changes (revisions, affected files)



### 3. Other Sites

#### Reddit

- A self-governed, community sourced news sharing site
- Default view is a list of trending items from a select number of sub-reddits (or "Subs"). Trending items are based on the number of views / clicks / votes.
- User can search and subscribe to Subs of a wide variety of topics
- Reddit has multiple metrics and economies in place
  - Gold - gold tokens are awarded by other users to people to encourage more good behaviour and participation. Gold token can be purchased by buying a reddit subscription or by earning them through participation.
  - Karma - there are two types of karma a user can earn: link karma, and comment karma. Karma is awarded by other community members by "upvoting". Conversely you can lose karma through "downvoting".



👤 Community-sourced content with a micro-economy.

👤 What becomes most visible is often what is more popular. Popularity alone may not be a good metric.