



Apache Olingo and the Google Summer of Code 2015



Agenda

- Google Summer of Code
- Apaches involvement in the GSoC
- OData and Apache Olingo
- The Apache Olingo GSoC Project
- Advice for future Mentors and Students
- Q&A

Google Summer of Code

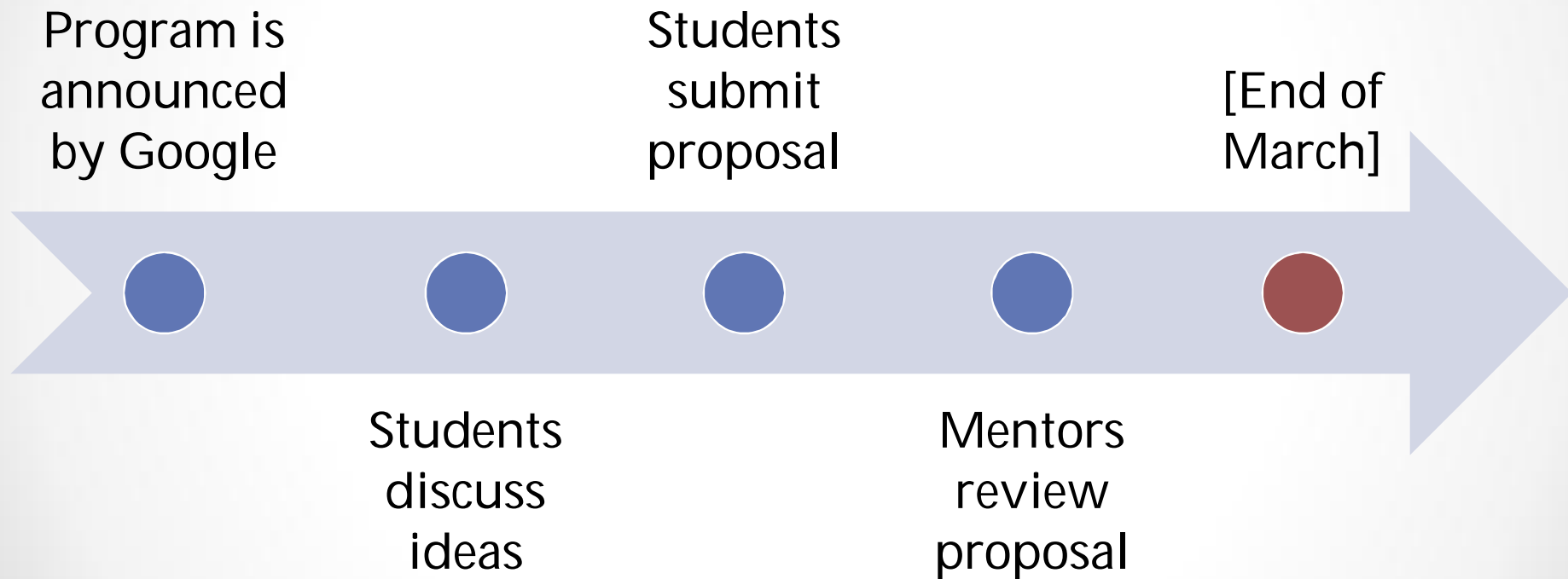
- Program organized by Google since 2005
- Students work for Open Source projects from May to August
- Awards stipends to students
- Awards t-shirts to mentors
- 6,409 proposals from 4,425 students in 2015¹
- 1051 student proposals accepted for 137 mentoring organizations²
- 87% passed final evaluation²



[1] <http://google-opensource.blogspot.de/2015/04/students-announced-for-google-summer-of.html>

[2] <https://developers.google.com/open-source/gsoc/resources/stats>

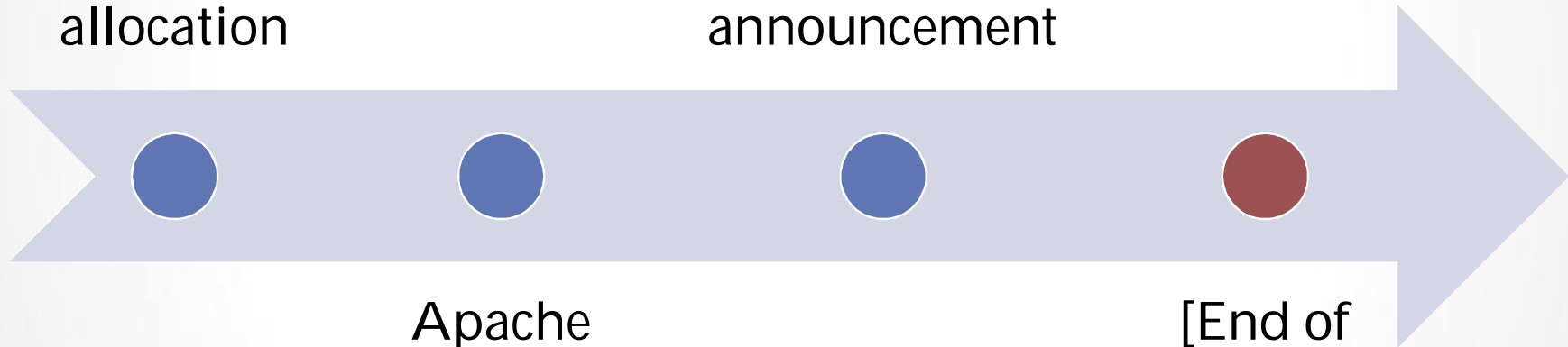
Google Summer of Code



Google Summer of Code

Google
announces
Slot
allocation

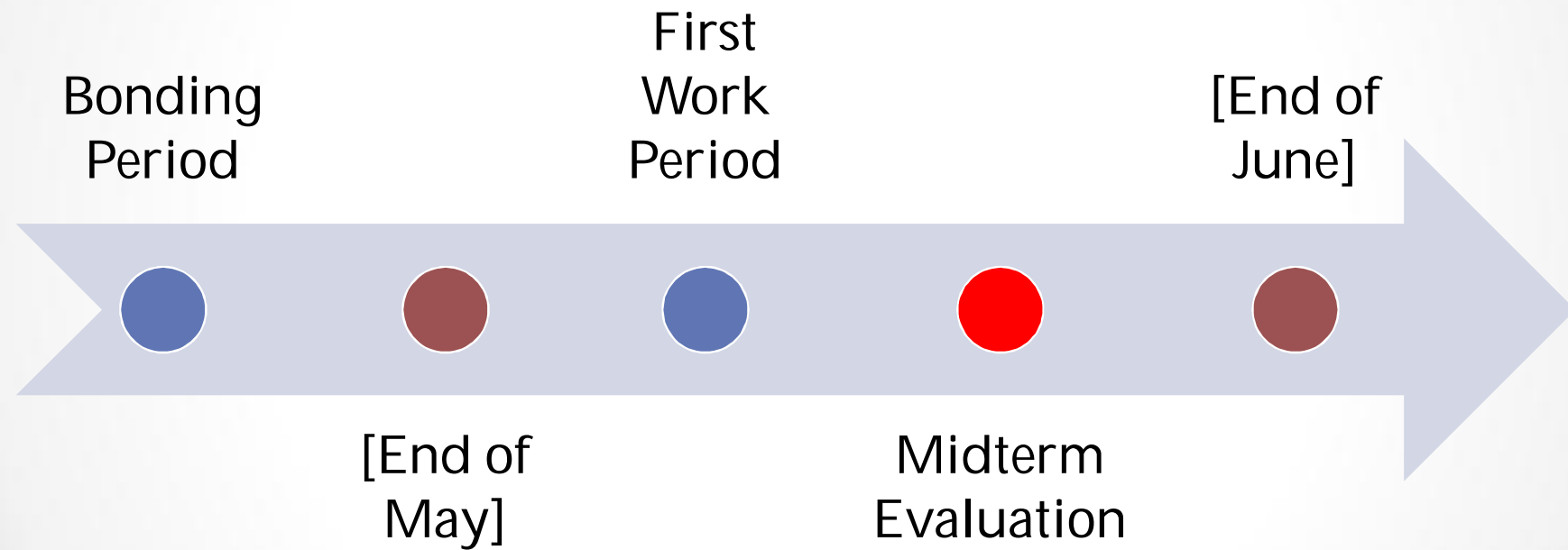
Accepted
projects
announcement



Apache
Projects
are
ranked
internally

[End of
April]

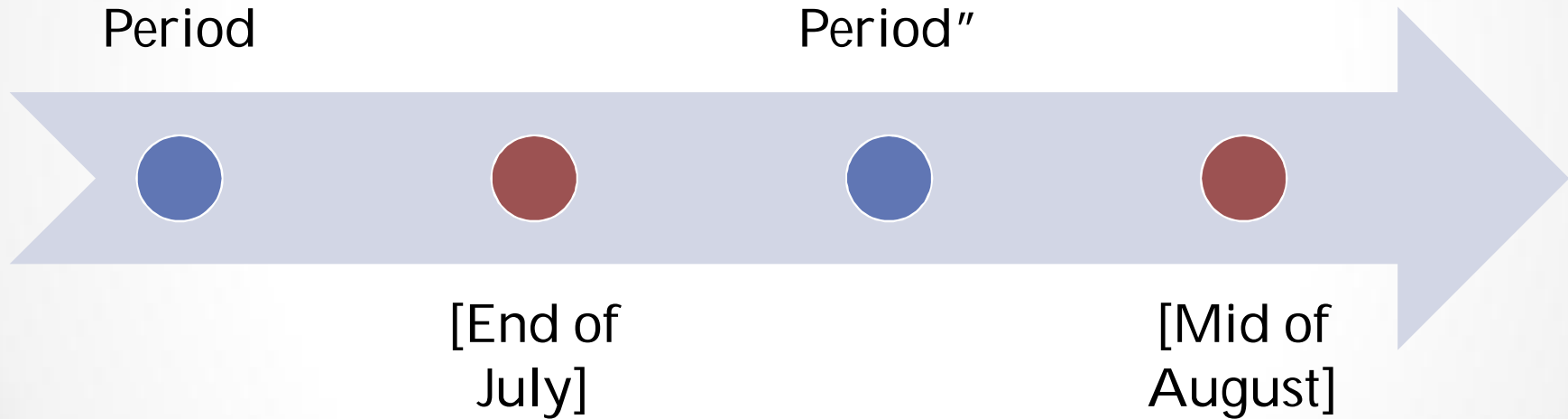
Google Summer of Code



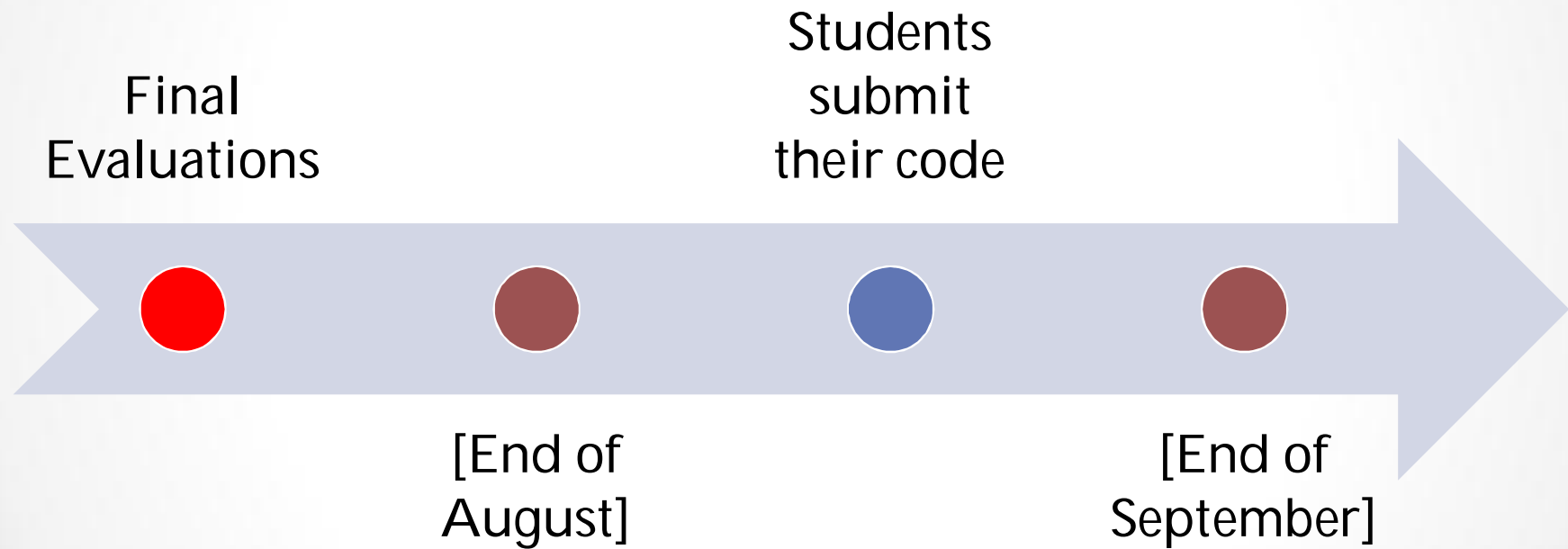
Google Summer of Code

Second
Work
Period

"Cleanup
Period"



Google Summer of Code



Apaches Involvement in the GSoC

- 118 Proposals by 108 students for 63 mentors
- 47 accepted projects registered for the Apache Software Foundation
- Communication done via the mentors@community.apache.org list
- Program Administration done via the dev@community.apache.org list

OData Protocol

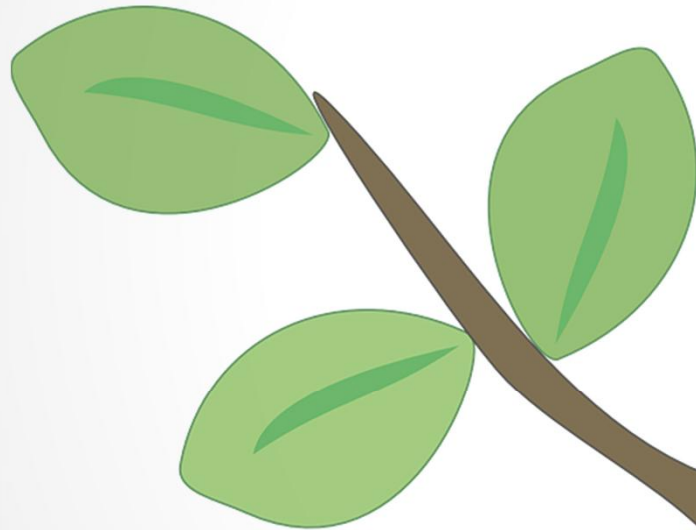


- OData stands for Open Data Protocol
 - is based on REST principles
 - supports JSON and AtomPub data formats
- Is an Oasis Standard
- Implementations available in
 - .NET, Java, JavaScript, Ruby, PHP, ABAP and ObjectiveC

Apache Olingo



Contributions from Microsoft in form of data.js (JavaScript) and OData 3.0 Java Client Library in 2014



Currently in development: OData 4.0

- Java Server library
- Java Client library
- JavaScript Client library

Contributed to Apache Software Foundation

- as Incubation project (August 2013)
- and promoted to Apache Top Level Project (March 2014)

OData Java library for OData 2.0 Client und Server by SAP

In a Nutshell, Apache Olingo - OData...

- ... has had 2,759 commits made by 29 contributors representing 913,207 lines of code
- ... is mostly written in Java with an average number of source code comments
- ... has a young, but established codebase maintained by a large development team with stable Y-O-Y commits
- ... took an estimated 249 years of effort (COCOMO model) starting with its first commit in July, 2013 ending with its most recent commit 4 months ago

Languages



Lines of Code



Activity

30 Day Summary

Apr 14 2015 — May 14 2015

104 Commits

9 Contributors

12 Month Summary

May 14 2014 — May 14 2015

1234 Commits

Down -291 (19%) from previous 12 months

20 Contributors

Down -3 (13%) from previous 12 months

Commits per Month

Zoom 1yr All



The Olingo GSoC Project

Prequel

- Heard about the GSoC the first time in February
- Searching for information? – Melange¹ and Apache² are your main sources
- Informed the Olingo Community about my plans
- Created JIRA issues with the GSoC2015 tag
 - Implement an OData JSON Metadata Document Serializer/Parser
 - OData \$search Query Parser for Olingo
 - Implement an OData V4 sample service using Olingo

[1] <https://www.google-melange.com/gsoc/homepage/google/gsoc2015>

[2] <https://community.apache.org/gsoc.html>

The Olingo GSoC Project

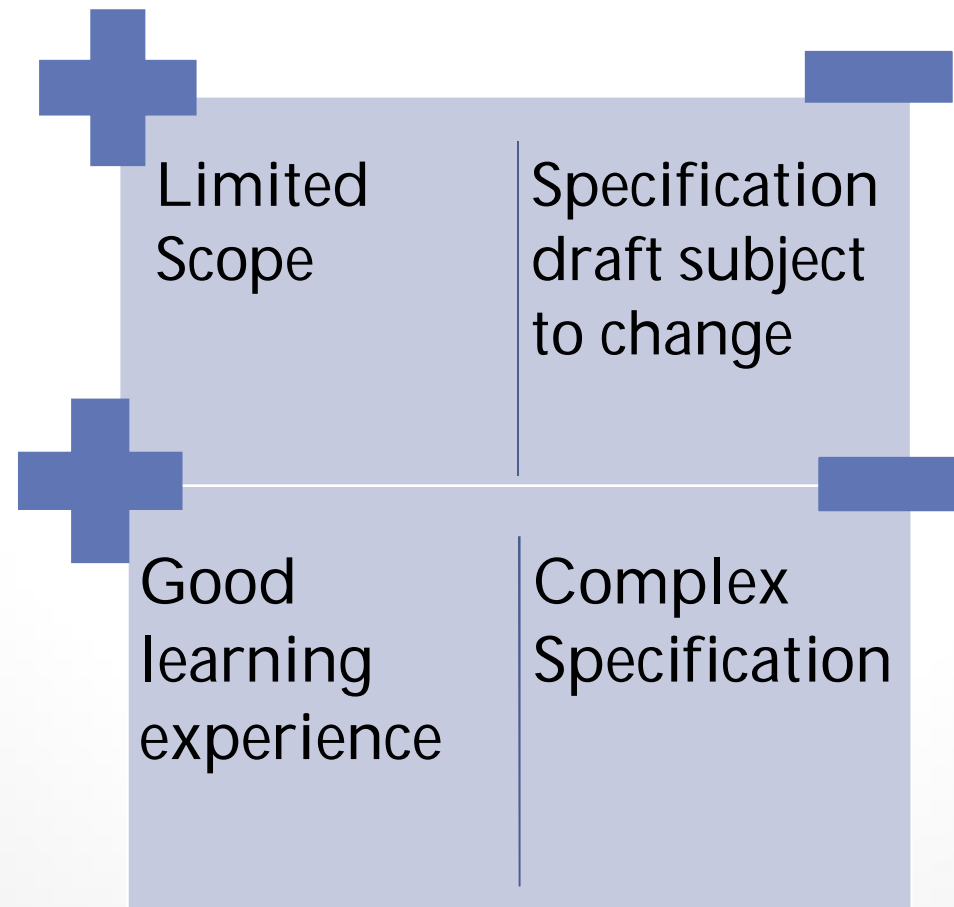
My Expectations



The Olingo GSoC Project

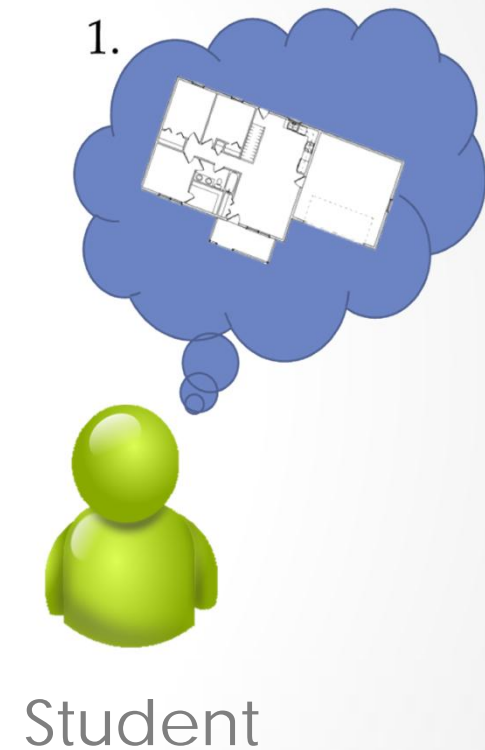
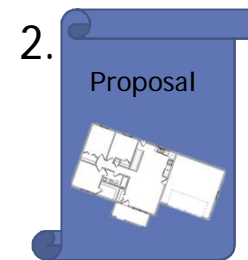
The Task

- Implement an OData JSON Metadata Document Serializer/Parser



The Olingo GSoC Project

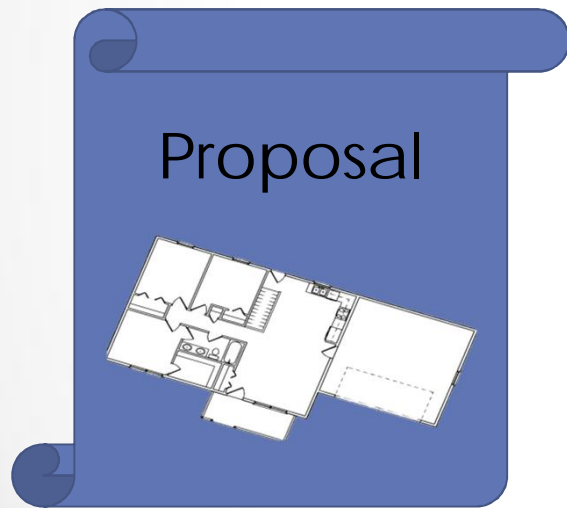
Application Phase



The Olingo GSoC Project

The Proposal

- First proposal draft was available on March 15th
 - Student introduction
 - Short abstract about the Open Source project
 - Abstract about the planned GSoC project
 - Detailed description of the project
 - Project scope
 - Planned timeline



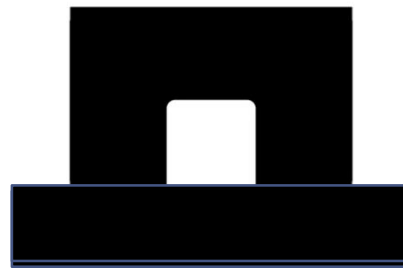
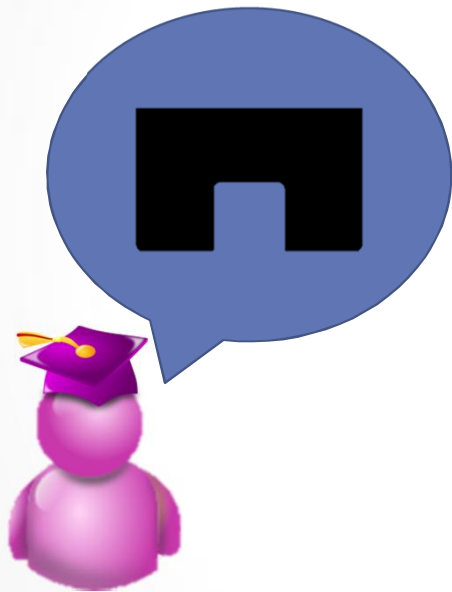
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Bonding Phase



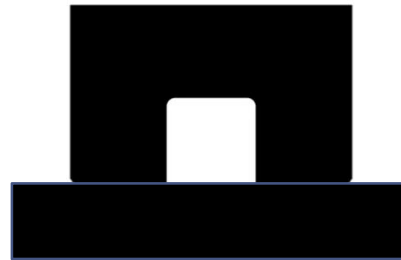
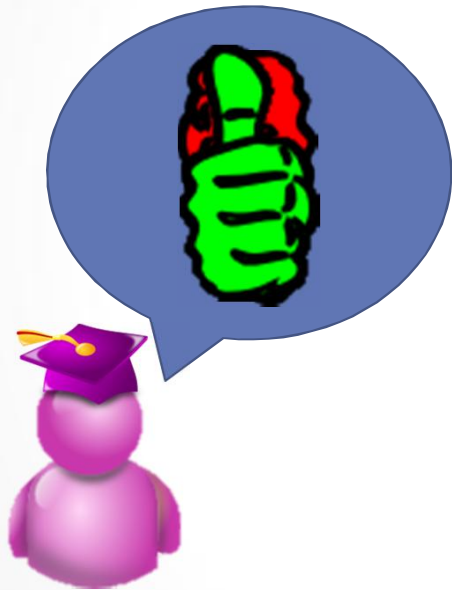
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First Work Period



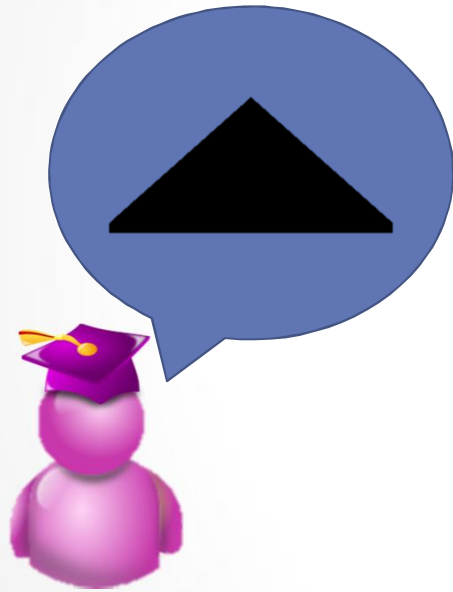
The Olingo GSoC Project

Midterms



The Olingo GSoC Project

Second Work Period



The Olingo GSoC Project

“Clean Up” Period



The Olingo GSoC Project

Final Evaluations



The Olingo GSoC Project

Advise for future Mentors

- Take part in the next GSoC
- Be prepared to spend more time than you anticipated
- Beware of time zone differences
- Have a face to face interview
 - Or at least a chat
- Stay positive and helpful
- Know what you want to achieve with the GSoC
- Don't promise what you can't keep
- If you have questions: Ask!

The Olingo GSoC Project

Advise for future Students

- Ask questions
- Use the project mailing lists as often as possible
- Start to make contact with project communities early
- Get involved with the project
- Be prepared to spend a lot of time
- Ask other students
- Stay for a future GSoC
- Don't promise what you can't keep
- And finally: Ask questions!



Q & A



Thank you



I hope you plan to take part in the next GSoC as a student or mentor.

Get involved with Olingo here:

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Christian Amend

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Useful Links

- <http://olingo.apache.org/>
- <https://www.google-melange.com/gsoc/homepage/google/gsoc2015>
- <https://community.apache.org/gsoc.html>