

# Being Software Architect

Nihad Abbasov, Software Architect

April 10, 2021 10:00-11:45 AM PST



## Chapter 3 | Session 03

# Agenda Overview

10:00–11:45 am

Time	Topic
10:00–10:10 am	Kick-off
10:10–10:20 am	Introduction
10:20–11:05 am	Presentation
11:05–11:10 am	Break
11:10–11:40 am	Q&A Discussion
11:40–11:45 am	Wrap up



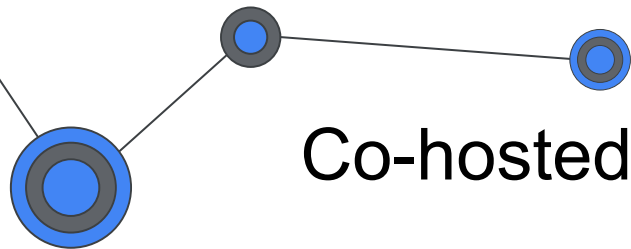
# Hosted by:

Rasim Abdullayev, Community Lead @ GOUP

**GoUp** Community driven Open source accelerator!

- Building next generation community: egoless, collaborative, competent, decentralized, scalable, fun community culture.
- Structure and index the data flow within community.





Co-hosted by:

**Vurgun Hajiyeu, Expertech**

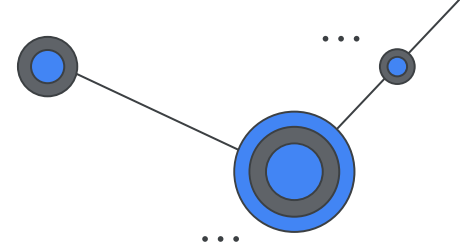
**Expertech** is a monthly tech meetup series organized by ATL Group to bring IT minds together.

The goal of this meetup series is a commitment to the development of the local IT ecosystem for professionals, students, and IT enthusiasts.



exper **t**ech

# We want to know you, if you fit!



<https://goupaz.slack.com>



<https://www.linkedin.com/company/goupaz>



<https://github.com/goupaz>



<https://youtube.com/goupaz>



<https://www.meetup.com/goupaz>



# Sponsors



<https://www.allmytaxes.com>

To reach for community event sponsorship contact us over Slack: [slack.goupaz.com](https://slack.goupaz.com)

# Code of Conduct

Build with love, push with sugar, pull with caution

1. Language is **English**
2. We are here to **collaborate**: learn, benefit and contribute
3. We are here **equal**: despite our roles, accomplishments
4. **NO** marketing, selling, competing

# Photo Shoot Time



Please, turn on camera and smile!



# whoami

**Nihad Abbasov**

[nihad@42na.in](mailto:nihad@42na.in)

[github.com/narkoz](https://github.com/narkoz)

- Software Architect
- Programming since 16 yo
- Open Source contributor
- Golang user group organizer
- AWS Certified Solutions Architect

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# Agenda

1. Software Architect role
2. Responsibilities and required skills
3. Become a Software Architect

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# **What is Software Architecture**

**Software architecture refers to the fundamental structures of a software system and the discipline of creating such structures and systems. Each structure comprises software elements, relations among them, and properties of both elements and relations.**

# **Who is a Software Architect**

**A software architect is a software development expert who makes high-level design choices and tries to enforce technical standards, including software coding standards, tools, and platforms.**

# **Responsibilities and required skills**

# **Design of the system architecture**



**Architectural  
design decisions  
are hard.**

**Bad decisions are  
expensive.**

**How to make a  
right decision?**

**Answer:**  
**trial and error.**

**Develop some  
expertise.**

**Have  
understanding of  
common software  
design patterns  
and architecture.**

**Consider business  
goals and  
requirements.**

**Every technical  
choice involves  
tradeoffs.**



# React or Vue?

**Monolith or  
microservices?**

**Answer:**  
**It depends.**

**No tech is perfect.  
There is no silver  
bullet.**

**What criteria  
should you use?**

**Answer:**  
**It depends.**

**Focus on  
Quality Attributes.**

**What are some  
quality attributes?**



# **The 5 Pillars of the AWS Well-Architected Framework**

Operational Excellence

Security

Reliability

Performance Efficiency

Cost

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# Other quality attributes

Maintainability

Scalability

Deployability

Simplicity

Usability

Compatibility

Modularity

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# And many more!

[https://en.wikipedia.org/wiki/List\\_of\\_system\\_quality\\_attributes](https://en.wikipedia.org/wiki/List_of_system_quality_attributes)

**What quality  
attributes do you  
focus on?**

**Answer:**  
**It depends.**

**Depends on the  
type of software  
you build.**

**It's a balance.**

**Find out what  
quality attributes  
matter most for  
your organization.**



**Build design specifications and  
system-related documentation**

# **How to document Architectural Decisions?**

**List assumptions  
and constraints.**

**Which quality  
attributes did you  
chose to focus on?**

**Why?**

**Use version  
control to store  
the  
documentation.**

**Ensure that the  
documentation is  
always up to date.**

# **Lead software development life cycle**



# Code Reviews.

**How to evaluate  
the code quality?**

**Compliance with  
established  
architecture,  
design patterns  
and standards.**

**Good selection of  
3rd party  
dependencies.**

**Good layered  
architecture.**

**Single source of  
truth.**

**Cyclomatic  
complexity is not  
high.**

**Good use of  
commenting.**



**Advanced  
techniques are  
used only where it  
makes sense.**

**Shortcomings are  
highlighted in the  
README file.**

**High test code  
quality.**

# **How to become a Software Architect**

**Gain experience as a Software Engineer**

**Get broad knowledge of various  
technologies**

**Learn new things. Constantly.**

**Technology  
changes.**



**New languages,  
frameworks,  
techniques,  
approaches.**

**How do you  
keep up?**

**Curiosity.**

**Self-discipline.**

**Follow a routine.**

**30 minutes per  
day. A couple  
hours every other  
day. Whatever fits.**

**Could be pet  
projects, open  
source.**

**Follow the tech  
news.**



**Hacker News,  
Youtube, Medium,  
Twitter, Mailing  
lists, etc.**

**Can't read it all. Be  
selective.**

**In fact, you'll miss  
90% of stuff.  
That's OK.**

**You cannot adopt  
every new thing.**

**Learning keeps  
things interesting.**

**Helps to avoid  
legacy platforms.**

# Soft Skills



**Be helpful.**



**Be open minded.**

**Speak their  
language.**

5 mins break

# Q&A Discussion



# Wrap-up

Feel free to reach out.



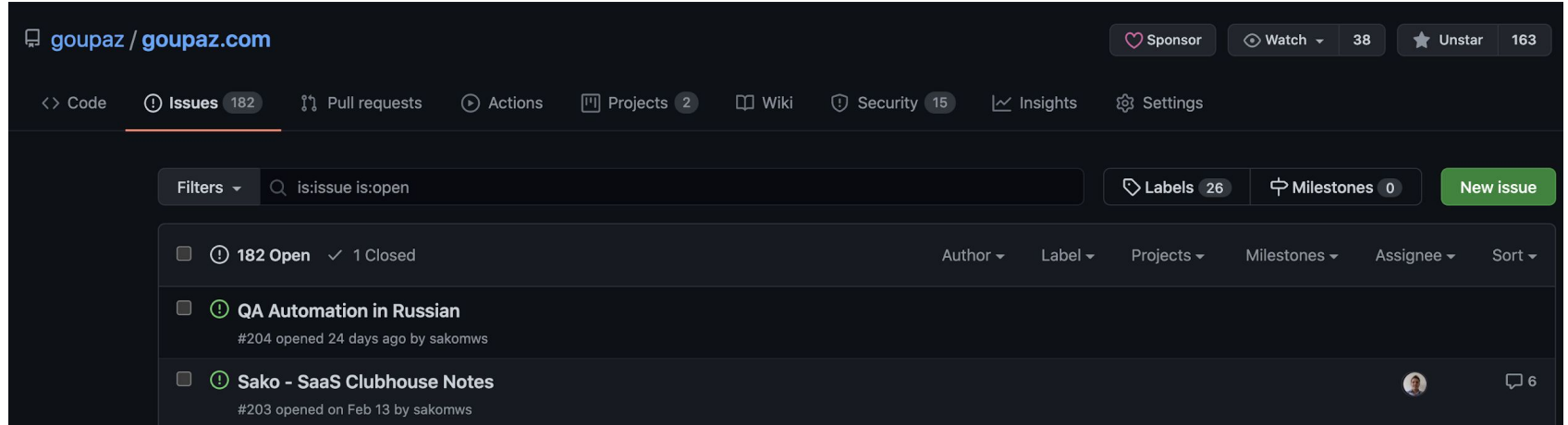
Collaborate, contribute, benefit !

**Find me anywhere at**

- <https://www.linkedin.com/in/nihadabbasov/>
- <https://github.com/NARKOZ>
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# We love Feedback

## Open Issue in Github :)



The screenshot shows the GitHub interface for the repository `goupaz / goupaz.com`. The 'Issues' tab is selected, showing 182 open issues. The search bar contains the query `is:issue is:open`. The list of issues includes:

- QA Automation in Russian** (#204) opened 24 days ago by sakomws
- Sako - SaaS Clubhouse Notes** (#203) opened on Feb 13 by sakomws

The interface also shows navigation links for Code, Pull requests, Actions, Projects (2), Wiki, Security (15), Insights, and Settings. At the top right, there are buttons for Sponsor, Watch (38), and Unstar (163).

<https://github.com/goupaz/goupaz.com>

**Thank you!**