Survey

Dear participants, first of all, we would like to thank you for agreeing and taking your time to fill out this questionnaire which will help us a lot in getting relevant results in order to achieve our goal. We are master students in software engineering at Mälardalen University, Sweden. The aim of this survey is to investigate what is the current state of JAMstack, as well as what are its main benefits and limitations with respect to other Web Technologies. The questionnaire consists couple of different types of questions: evaluation, open-ended questions, and close-ended questions. The survey is anonymous and will only be used for academic purposes.

In case you have any questions you can contact us on the following emails:
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General info

Name (It will be only used for the private records of the authors and will remain anonymous to the public audience)

Your answer

1. How much experience do you have in web development? *

○ Less than a year

○ 1 - 3 years

○ 3 - 5 years

○ 5 - 10 years

○ More than 10 years

2. Select the role that fits you best? *

○ Full-stack developer

○ Front-end developer

○ Back-end developer

○ Mobile developer

○ Database expert

○ Other:

3. Which of the following stacks have you had experience with? *

- [ ] JAMstack
- [ ] LAMP
- [ ] MEAN
- [ ] MERN
- [ ] Other: _____

4. How much experience do you have in JAMstack? *

- ( ) Less than a year
- ( ) 1 - 3 years
- ( ) More than 3 years

5. How much experience do you have in traditional stacks (LAMP/MEAN/MERN)? *

- ( ) Less than a year
- ( ) 1 - 3 years
- ( ) More than 3 years

6. To which of the following stacks are you leaning towards? (3 - neutral) *

	1	2	3	4	5	
JAMstack	( )	( )	( )	( )	( )	Traditional stacks (LAMP/MEAN/MERN)

7. Which of the following APIs and tools have you heard of and find useful for JAMstack? *

- [ ] Algolia
- [ ] Auth0
- [ ] Netlify Forms
- [ ] Snipcart
- [ ] Stripe
- [ ] Strapi
- [ ] GraphQL
- [ ] FaunaDB

8. Are there any APIs or tools for JAMstack that you would particularly point out?

Your answer

9. JAMstack benefits

Performance - With static pages delivered through CDN the loading speed of the JAMstack website usually achieves the highest possible score on speed tests. There are three aspects that are usually used as metrics of website speed and they are: LCP (largest contentful paint), FID (first input delay), CLS (cumulative layout shift). *

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

Security – Thanks to the static storage or CDN that serves your application, APIs that are read-only and accessible exclusively for building environment, attacks can be reduced to minimum if not even removed completely. Since the layer has no database, sites are not vulnerable to server-side include injections. Besides, the use of external platforms such as Netlify can provide protection against DDOS and DNS attacks. *

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

Flexibility - JAMstack uses third-party services more known as headless CMS for managing content on the website. Since headless CMS are separated from the front-end of the website it means that the API that is created with headless CMS can be used and easily displayed across multiple platforms. *

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

Pricing - The whole JAMstack website requires a small amount of resources and can be hosted on CDN using some free static hosting like Netlify or GitHub Pages which will reduce the cost. *

	1	2	3	4	5

SEO - JAMstack page content is static which means that the speed of the website will be fast and indexing the pages of the website will be a lot easier in comparison with other web stacks which are the two most important factors for a good ranking on the internet. *

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

Developer experience - JAMstack developers have more freedom in choosing the technologies they will use in accordance with their knowledge, wishes and needs unlike other web stacks. The fact that front-end is separated from the backend makes developer experience far more enjoyable and easier because they can focus on one thing. Since JAMstack is static, all files can be stored on GitHub, Netlify or Vercel which makes the deployment easy and what matters to many, all for free. *

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

Select value depending on how much do you agree or disagree with following claims:

10. JAMstack Limitations

Dynamic functionalities - While JAMstack can be dynamic it is usually harder to implement some dynamic functionality and it mostly requires relying on third-party services for adding more complex features (For example if you want to have search on your website you can't do it on your own. You will need to use Algolia or other third-party service). *

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

Delay in live preview - Before seeing the actual changes on the website, everything needs to be pushed on Github. This can cause frequent delays especially when it comes to very dynamic sites that need constant changing of the content. *

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

Reliance on third-party systems

Since JAMstack does not have a database or its server and all APIs are hosted by a third-party, application is coming out with the following risks:

Availability - In case the system goes down, your website will feel the consequences because there is no communication with the API. Whether a solution will be reached and if the system will function again, is out of your hands and depends entirely on the provider. *

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

Confidentiality - Entrusting all content to a third-party is the risk that confidential content could be disclosed. *

	1	2	3	4	5	
Strongly Disagree	O	O	O	O	O	Strongly Agree

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11. Did you encounter any other limitations or benefits that are not already listed while using JAMstack? Please describe them.

Your answer

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12. In your experience with JAMstack and traditional stacks, for which kind of site one would be a more suitable option than the other? (3 - neutral)

Blog and Portfolio *

	1	2	3	4	5	
JAMstack	O	O	O	O	O	Traditional stacks

E-commerce *

	1	2	3	4	5	
JAMstack	O	O	O	O	O	Traditional stacks

Social media *

Social media *

	1	2	3	4	5	
JAMstack	○	○	○	○	○	Traditional stacks

News and Magazine *

	1	2	3	4	5	
JAMstack	○	○	○	○	○	Traditional stacks

Media streaming *

	1	2	3	4	5	
JAMstack	○	○	○	○	○	Traditional stacks

Anything to add?

13. What would you list as the advantage of traditional stacks (LAMP, MEAN, MERN) over JAMstack? Please explain.

Your answer

14. In your experience so far, do you think JAMstack will be able to overcome other web stacks in the future and become de facto standard? Please elaborate your answer.

Your answer

Rate the survey

	1	2	3	4	5	
Very bad	○	○	○	○	○	Very good

Comments or suggestions about the survey

Your answer