Maturity model for full stack engineers

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About this document

Please read the following document before reading the information in this document.

https://github.com/Fintan-contents/full-stack-engineer-maturity-model/blob/master/en/README.md

The document at the above link explains points such as why this document was created, how it is intended to be used and the background of the definitions in this document. Read this before using this document to assess engineers' skills and make future plans.

Ranks and levels

The maturity model for full stack engineers measures skills in ranks and levels.

Four levels are set for each area (server side, infrastructure, etc.) and four ranks are set based on that number of achieved area and judgment level.

Levels are a more detailed measured than ranks, and the ranks of full stack engineers are determined based on the number of area-based levels that are achieved.

Definitions of ranks for full stack engineers

The table below provides definitions of each rank.

Rank	Definition	Required levels (all items are required)
_		Level 4 in three or more areas, Level 3 or higher in five or more areas (including Level 4 grades),
4)	can instruct less experienced engineers in all areas.	Level 2 or higher in all areas
	An advanced engineer. Can develop services while working with a small team to supplement their skills and can instruct less experienced engineers in their strong area.	Level 4 in one or more areas, Level 3 or higher in three or more areas (including Level 4 grades)
	An intermediate engineer. Is gaining technical knowledge at a wide range of fundamental levels and becoming strong in particular areas.	Level 3 in two or more areas, Level 2 or higher in four or more areas (including Level 3 grades)
_	A beginner engineer. Has developed the fundamental human skills and aims for a career as a full stack engineer.	-

The levels required to achieve each rank are mapped as follows.

^{*}Detailed definitions of each level are provided later.

Rank 4							
					Court term	Cloud-lawed projects	
lina	Sener applications	Frei-ent-wit-devolgement	Malile development	Development processes	Detailment	bitatutus (steols, GS, drap, vital (ostales))	
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Rank 3						
					Classif projects	
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saulė. Dandosa activisalas flu igit padatis revi sąvieneris.	described here for the set is small or an employed to the improved spinols, who will be in day and improved as were what is product in the other who will be product in the other product of collecting place. So it should be an improved as and produced as an improved as the improved as and produced as the improved as and produced as the improved as the improved the improved the the improved the improved the improved the improved the improved the improved the improved the improved the improved the the improved the improved the improved the the improved the improved the improved the improved the the improved the im	enver application to meet the requirements of products, and has used these for design and implementation. - Has worked on projects and release after relecting products and establishing policies.	echa usd they brokely and implementation.	equinents portions codignation for the development project. - Creating development processes in-solver deciding the flowing point. - Nethod (unstable or Scotta) - Albatos of delevanities Codignation management Testing and depliquent Coefficients.	white exists a dathle does course to merche regularment of products, and have not deep for deep and implementation. - Not worked on projects will selected products and establishing policies. - Can counts according policies to be followed by the development team.	The select distalls duct their infrastructure inviviate must be produced by placing, and and these for design and implementation. The socked on project and indees after which products and embelong police.
Javel 2: On immakes producter than these decided on	-Sementicular as application frameworks to be used there belonds -Can decide on how to implement released graduate to self the project and then apply them to the project.		-Demonstrating places from each code and two bins selected. -Conscious nation is imprinted released productions and the project and then apply from to the project.	 - On any sot improvement activities for development pursuase that have been decided on, based on the estuation of the beam 	- The data storage product to be used fine been selected. - One decide with the transplant selected products to select the project, and then apply them to the project.	- The doublewed infrastructure remice to be used term selected. - Our docks on their to implement selected produ- seld the project and then apply them to the project
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Rank 2							
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Same 2: Date read and date discounted to and it is a limited to any of contract to and it. and it. and it. and it.	excutly measures have been established. - Can read documents on languages and libraries to be used according to the policies and designs that have	The method, design, formework and libery of the applicate has been elected and policies and an amounty research have been effected and policies and an amounty research have been effected and an alternative to be asset according to the options and disequent to these asset according on the policies and disequent to these asset according on the three asset according on the three according on the liquid policies.	The method, resign, flamework set (livery of the special tests to have reserved only given used as settly research have been emission, and the settly research have been emission, and the settly to be priced and sequence of the sector and sequence of the sequence o	-On carp and development with activity to a development product the flux flux devoted.	-Can road documents on data storage products that have been selected according to the policies and designs. that have been decided on, and then use and implement	- The infrastructure elements and products comprising the system have been related and pricious such as smoothy measures trave bee established. - Can send documents on that Sease of Infrastructure short have been related and the product and other than been decided on, and there use and implement them.	
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Definitions of skill areas and levels for full stack engineers

Overall premise when reading this table

The areas and required skills and experienced indicated in this table are not dependent on particular products or services. If particular products and services were indicated in the judgment conditions, the criteria would be reduced to the names of those products and services, which would not cover the skills that are needed, and may eventually become obsolete.

Full stack engineers also need to keep up to date with the rapid changes in the IT industry and choose the right technology based on current trends, so past performance and experience is not the focus when judging levels.

Levels need to be judged based on experience gained in technical elements in the last few years. For example, if an engineer is developing and releasing software based on knowledge of technical elements that they gained 10 years ago, that work does not qualify for the level judgments used for full stack engineers, regardless of the engineer's experience.

All of the skills and experience indicated for each level are required.

Resources such as the AWS best practice guide or useful materials for cloud services can be use for the infrastructure area.

management services are used. The use of

Cloud-based projects Front-end web Mobile **Development** Infrastructure **Server applications** Area development development **Database** processes (networks, OS, storage, virtual (containers)) Level 4: Can choose and introduce the Presumption right product to meet requirements Has experience in selecting frameworks - Has experience in selecting frameworks Has experience in selecting frameworks Can create, implement and educate others - Has experience in selecting a suitable data - Has experience in selecting suitable cloud nd libraries to be used for server nd libraries to be used for server and libraries to be used for serve bout development processes, taking into tore to meet the requirements of products, ased infrastructure services to meet the and has experience in using these for design applications to meet the requirements of pplications to meet the requirements of applications to meet the requirements of count the requirements and team equirements of products, and has products, and has experience in using these products, and has experience in using these products, and has experience in using these onfiguration for the development project. and implementation. experience in using these for design and for design and implementation. or design and implementation. for design and implementation. mnlementation Has worked on projects until release after Creating development processes involves Has worked on projects until release after Has worked on projects until release after - Has worked on projects until release after eciding the following points electing products and establishing policies. - Has worked on projects until release after Required skills and experience electing products and establishing policies. electing products and establishing policies. electing products and establishing policies. - Method (waterfall or Scrum) electing products and establishing policies. Can create secure coding guides to be Definitions of deliverables Can create secure coding guides to be - Can create secure coding guides to be followed by the development team. Can create secure coding guides to be - Configuration management ollowed by the development team llowed by the development team ollowed by the development team - Testing and deployment - Operation Level 3: Elements such as application frameworks Elements such as application frameworks Elements such as application frameworks The data store product to be used has The cloud-based infrastructure service to Can introduce products that have o be used have been selected. o be used have been selected. to be used have been selected. neen selected ne used has been selected been decided on Can decide on how to implement selected - Can decide on how to implement selected Can carry out improvement activities for roducts to suit the project and then apply oducts to suit the project and then apply roducts to suit the project and then apply evelopment processes that have been roducts to suit the project and then apply roducts to suit the project and then apply Required skills and experience em to the project. nem to the project hem to the project. ecided on, based on the situation of the hem to the project. nem to the project Level 2: The architecture, design, framework and The architecture, design, framework and The architecture, design, framework and The infrastructure elements and products The infrastructure elements and products Can read and use documents comprising the system have been selected library of the application have been selected library of the application have been selected library of the application have been selected comprising the system have been selected Presumption and policies such as security measures have een established. een established en established en established - Can read documents on languages and - Can read documents on languages and Can read documents on languages and Can carry out development work according | - Can read documents on data store - Can read documents on cloud-based libraries to be used according to the policies libraries to be used according to the policies libraries to be used according to the policies o a development process that has been products that have been selected according infrastructure that has been selected and designs that have been decided on, and and designs that have been decided on, and and designs that have been decided on, and to the policies and designs that have been according to the policies and designs that nen use and implement these. nen use and implement these. hen use and implement these. decided on, and then use and implement nave been decided on, and then use and nnlement these Required skills and experience Can implement security measures Can implement security measures - Can implement security measures ccording to the guide. ccording to the guide. according to the guide. Can implement security measures according to the guide. Level 1: Lacks knowledge and experience