29.06.24

Hallo Jakob,

ich hoffe Euch dreien geht es gut, insbesondere aber Deinen Damen!  
Wahrscheinlich ist alles noch neues Terrain und ihr seid ein bisschen unter Stress.

Vielleicht findest Du ja ein wenig Muse für unser vereinbartest Projektchen. Bei mir hat es ein bisschen länger gedauert als erwartet, weil 2 Themen mehr Aufwand erfordert haben als gedacht:

1. Ich habe den Code für den KI-Part ganz neu geschrieben und auf alle Libraries verzichtet, die zwar das Leben einfacher machen aber auch weniger durchschaubar und modifizierbar sind.  
   Die Rollen der Interviewer sind ein erster Versuch, der Ablauf des Interviews kann ebenfalls noch beliebig erweitert werden.
2. Ich musste mich in die Schnittstellenthematik Pyhton – html einarbeiten und habe hoffentlich eine sinnvolle Basis dafür gefunden.

Ich denke, wir sollten das sowieso in Zoom, Teams oder Skype gemeinsam durchgehen, trotzdem hilft vielleicht diese kurze Beschreibung des Vorgehens und das einfach vom Bildschirm kopierte Beispiel unten zum Verständnis. Falls Du Lust und Zeit hast, können wir das gerne mal durchgehen. Mach einfach einen Terminvorschlag, meistens bin ich ja da.   
Ich versuche mal es in github hochzuladen – ohne api-key.  
Auch die Libraries muss ich für die Installation noch erstellen ……

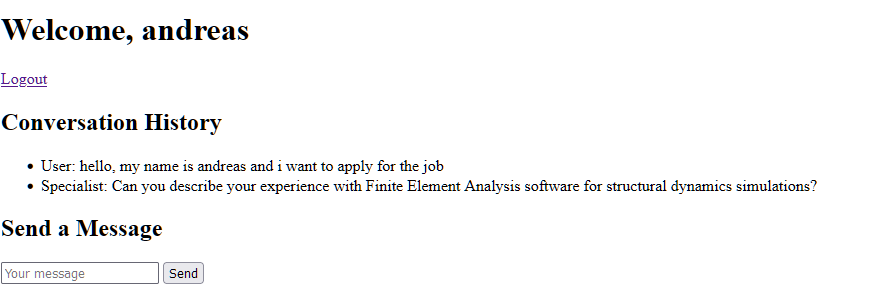
Zur Struktur:

* Python nutzt Flask und hört auf den Endpoint <http://127.0.0.1:5050/>
* Der user meldet sich an (index.html) und ab da alles wird in einer session history gespeichert



Diese ist user-spezifisch und wird mit dem /logout wieder gelöscht

* Nach dem login gehen wir in eine loop mit interview.html, das ist ganz einfach ein Eingabezeile für den user und die Antwort der KI sowie die ganze Historie wird über diesem Eingabefenster dargestellt.



* Danach folgt das Interview mit mehreren Phasen:  
  content\_list = [ 'question', 'evaluation', 'feedback', 'discussion']  
    
  Das heißt es gibt eine Fragerunde der Mitglieder der Jury,  
  das ist die members\_list = [ 'Moderator', 'HR', 'Manager', 'Specialist' ],  
  repräsentiert durch ChatGPT oder einer beliebigen KI,  
  Fragen stellen die der Kandidat im Eingabefenster beantwortet.  
    
    
    
  Auf die Fragerunde folgt die evaluation, in der ohne Mitwirkung des users alle Jurymitglieder (KI) ihre Bewertung abgeben. Dies wird im Beispiel unten noch ausgegeben.   
    
  Dann folgt die Phase „feedback“, in dem KI die gesamt evaluation aller Jurymitglieder noch einmal zusammenfasst und dem user anzeigt.  
    
  Darauf folgt die Phase „discussion“ in der der user Fragen zum Ergebnis stellen kann, die reihum von den Jurymitgliedern beantwortet werden sollen. Das funktioniert noch nicht so ganz ……

**Welcome, andreas**

[Logout](http://127.0.0.1:5050/logout)

**Conversation History**

* User: hello, my name is andreas and i want to apply for the job in CAE engineering position in structural dynamics with FEM.
* Specialist: Can you explain your experience with Finite Element Analysis (FEA) software and how you have used it in structural dynamics simulations?
* User: in early years i have been responsible for installation and running the FEM system Nastran on computer servers. Later i have been working for 15 years as a NVH FEM specialist in the field of vehicle vibrations, such as components like steering wheels, entire vehicle dynamics like riding comfort and interior noise. All structural dynamics has been done with FEM NASTRAN or PERMAS, riding comfort with MKS Simpack.
* Hr: Can you provide an example of a time when you had to collaborate with a multidisciplinary team to solve a complex engineering problem in the field of structural dynamics with FEM?
* User: As the CAE project leader in the development for vans and trucks i had to coordinate all CAE disciplines like durability, crash, nvh and fluid dynamics. i had short daily meetings for trouble shooting and weekly meetings for global orientation. all projects have been very successful.
* Manager: Can you describe a time when you had to prioritize tasks and resources within a project focused on structural dynamics with FEM? How did you ensure the project remained on track and met its deadlines?
* User: of course we had challenges in time and financials. each month i had a meeting with the leaders of the cae disciplines to check these topics. together we anayzed the critical path, discussed measures to keep on track and evaluated the risks. same for fnancials: where could we reduce spending with the smallest risk. mostly a common agreement was found. sometimes i had to decide as the responsible leader.
* Moderator: Can you elaborate on your experience with FEM NASTRAN and PERMAS in the context of structural dynamics simulations? How have you utilized these software tools to optimize designs and analyze structural behavior?
* User: NASTRAN was more suited for dynamic analysis while PERMAS had some very good tools methods to summary damage over many different loadcases. so it turned out the we used nastran in dynamics and acoustics and permas for durabilty.
* Moderator: I would rate the candidate's performance as an 8 out of 10. The candidate demonstrated a strong understanding of Finite Element Analysis (FEA) software, particularly NASTRAN and PERMAS, and showed expertise in utilizing these tools for structural dynamics simulations.
* Moderator: One recommendation for improvement would be to provide more specific examples or projects where the candidate applied NASTRAN and PERMAS in optimizing designs and analyzing structural behavior. Additionally, showcasing any unique challenges faced and innovative solutions implemented would further strengthen the candidate's profile.
* Hr: I would rate the candidate's performance as a 9 out of 10. The candidate effectively demonstrated their experience in collaborating with multidisciplinary teams to solve complex engineering problems in the field of structural dynamics with FEM.
* Hr: One recommendation for improvement would be to provide more specific details on the outcomes and impacts of the successful projects they mentioned. Including metrics or key performance indicators to showcase the effectiveness of their collaborative efforts would enhance their response.
* Manager: I would rate the candidate's performance as a 9 out of 10. The candidate showcased excellent leadership skills in prioritizing tasks and resources within projects focused on structural dynamics with FEM, ensuring the projects remained on track and met their deadlines.
* Manager: One recommendation for improvement would be to delve deeper into specific examples where the candidate encountered significant challenges in project prioritization and resource allocation, and how they overcame these obstacles. Providing quantifiable results or impacts of their decisions would further highlight their effective project management abilities.
* Specialist: I would rate the candidate's performance as an 8 out of 10. The candidate demonstrated a strong understanding of Finite Element Analysis (FEA) software, particularly NASTRAN and PERMAS, and showed expertise in utilizing these tools for structural dynamics simulations.
* Specialist: One recommendation for improvement would be to provide more specific examples or projects where the candidate applied NASTRAN and PERMAS in optimizing designs and analyzing structural behavior. Additionally, showcasing any unique challenges faced and innovative solutions implemented would further strengthen the candidate's profile.
* Moderator: please find the Panels evaluation and recommendation in comments above
* User: thanks you
* Moderator: And here is the overall evaluation and recommendation of the Panel: The candidate received strong ratings of 8-9 out of 10 from the panel members. They have showcased a deep understanding and expertise in using FEA software, specifically NASTRAN and PERMAS, for structural dynamics simulations. Recommendations for improvement include providing more specific examples of projects, challenges faced, and outcomes to further bolster their profile.
* User: i am disapointed by not getting top ratings. seems you don't believe me.
* Specialist: Based on the assessments provided by the panel members, it is clear that you have a strong understanding of Finite Element Analysis (FEA) software, specifically NASTRAN and PERMAS, and have demonstrated expertise in utilizing these tools for structural dynamics simulations. The panel members have highlighted the importance of providing more specific examples of projects where you applied these tools to optimize designs and analyze structural behavior. To further strengthen your profile and showcase your capabilities, could you elaborate on a particular project where you faced a unique challenge in structural dynamics analysis and the innovative solution you implemented to overcome it?
* User: i have done a lot of loops with vibration testing of components to validate my entire vehicle model. for example, i validated steering with testing, steering wheel together with cockpit, cockpit with white body and so on. this was crucial to perform frequency response anlysis.
* Moderator: It's understandable to feel disappointed when not achieving the top ratings you had hoped for. However, the panel members recognize your strong understanding and expertise in using FEA software for structural dynamics simulations. To address the feedback provided, could you elaborate on a particular project where you faced a unique challenge in structural dynamics analysis and the innovative solution you implemented to overcome it? Providing detailed examples will help showcase your capabilities more effectively.
* User: i think you want to fool me by always the same questions.
* Hr: Based on the assessments and feedback provided by the panel members, it is evident that you possess a strong foundation in utilizing FEA software, specifically NASTRAN and PERMAS, for structural dynamics simulations. To address the recommendations for improvement and further enhance your profile, could you elaborate on a specific project where you encountered significant challenges in project collaboration or leadership, and describe the strategies you employed to overcome these obstacles? Providing detailed examples with quantifiable outcomes will help showcase your ability to effectively navigate complex engineering problems.

**Send a Message**