# [LEAD DEVELOPER CANDIATE]

## Recommendation

No Hire

## Summary

My overall impression is that [Candidate] has a strong entrepreneurial spirit, understanding of data analytics, and enthusiasm. He seemed more comfortable with the managerial duties then he did with the gathering of requirements or design of services. My main concerns lie around his technical acumen; I did not find [Candidate] to have a solid grasp of distributed architecture, developing for scale, or REST concepts, displaying only a peripheral knowledge of each with limited understanding.

## Areas of Exploration

I was tasked with exploring the higher-level design and architecture skills, particularly around web applications, distributed system, and services. My overall approach was to use the latest project on his resume and talk about potential requirements for enhancing it to probe how he would go about revising his approach and architecture to accommodate. I also evaluated personality and overall fit for team culture.

## Feedback and Observations

[Candidate] has a free and easy personality, is approachable, and was enjoyable to speak with. We talked over some of the recent work that he has been doing for the application development studio that he co-founded, with some light touches on his other professional roles. He was able to speak knowledgably about the challenges of a small company, balancing features with scheduling, costs, and release cycles. He voiced only some high level thoughts around the role of services in mobile applications and I was not able to guide him into a discussion where he started brainstorming ideas for potential services to expand the functionality of his own app. Overall, I had a difficult time guiding [Candidate] to the level of detail that I was looking for during the conversation; he was very open and discussed topics at a high level, but I got the impression that he wasn't as aware of or involved with, some of the more detailed areas of his product, including the "backend" which he identified himself as the owner of.

We proceeded to whiteboard the current architecture for his app, including the set of services, and I asked [Candidate] to describe the service contracts for his authorization endpoint. He seemed somewhat uncomfortable talking over request/response contracts, though was happy to discuss the url structure. I noted that he had some potential flaws in his authentication scheme and attempted to discuss with him. [Candidate] did not demonstrate a good awareness and understanding of basic security, and was unsure of why passing a hashed password along with the user name on the query string over HTTP was a risk. Once I explained some of the risk, I attempted to get his thoughts on what potential mitigations were. [Candidate] was not able to brainstorm ideas well and when I suggested using SSL, he appeared to be confused as to why that may help. I repeatedly attempted to guide [Candidate] into thinking about how he would design a service now instead of focusing on the implementation that his app uses today, but was unable to do so effectively. [Candidate] kept falling into the pattern of telling me how his service/app worked and not how he would design it from scratch knowing what he knows today.

We then talked over the need to version the application and services while still supporting the previous version. I used a hypothetical second app as a new consumer of his existing service with expanded needs. It was, again, difficult to guide [Candidate] into brainstorming what changes he would make rather than describing how things currently work. Ultimately, he was able to come up with a few minimal solutions, but could not articulate the trade-offs between the choices when we talked through them. He also was unable to discuss the challenges of supporting a mobile app with multiple versions side-by-side and didn’t seem to be aware that updates may not be immediate for some consumers.

Finally, we discussed scaling the services and ensuring that they could meet the load that was necessary. It was difficult to keep [Candidate] on topic, as he kept wanting to drift to an idea that he had for an environment where service instances were automatically added and removed based on demand. While his ideas were good, they were described at a high level and I was unable to fish out much low level detail on his design or how he would act on those ideas. I also felt that he was unable to determine some approaches for how he may determine how many instances he needed, either from testing or within the architecture that he was describing.

Though outside my area of interview responsibilities, because his resume called out that he was an expert in C# and an expert in JavaScript, I drew a simple closure scenario that appears often in real-world JavaScript and asynchronous C# use. [Candidate] was unable to do much reasoning or demonstrate much familiarity with the code, let alone the closure scenario. I felt that [Candidate] could not demonstrate the set of technical skills identified on his resume as advanced-to-expert.

When [Candidate] had the chance to ask me questions, he focused on the day-to-day responsibilities of the role, the methodology and process used, and team culture. I did not observe anything of note during this part of the conversation.