

1)

The mainframe era ended because computers became smaller, cheaper and more powerful. Companies then built their own infrastructure for their services. Large web services such as Amazon then had the problem that the computational power they needed spiked at certain moments, which resulted in them buying a lot of hardware which was left unused most of the time. Out of that the idea of renting out this computational power was born. Cloud architectures are especially interesting for smaller companies because there is no investment in infrastructure needed and they only pay what they use.

2)

more scalable than my program, as it simply can get more AWS ec2 servers and the DB system. It is also billed based on usage.

Uses message queues between each individual component to be more loosely coupled. There are no direct function calls between the components.

Computation is done in parallel