Please provide a summary of your preliminary proposal (not more than 600 words), covering the corruption-related problem(s), your idea/solution to address such problem(s), the technologies to be applied, and the intended outcomes/benefits of your idea/solution.

Infrastructure projects are what make a city run and breathe. From highways to hospitals, as the foundation of any civilization, the completion and integrity of these projects should never be undermined. Yet, corruption during the project development cycle has led to catastrophic results over the years, causing significant financial losses to the government and even casualties due to violations of safety standards. To hone in on one specific aspect of the problem, our team hopes to focus on enhancing the validity of project contracts.

During the implementation stage of the project, contracts can prove to be both a failsafe and a vulnerability. On one hand, they can leave a paper trail which verifies the agreement between various parties, providing solid evidence for collaborating the fulfilment of contractual obligations. On the other hand, conventional paper contracts are susceptible to tempering which gives way for corruption to take place. Our team strongly believes that by implementing a robust contractual system, it could lead to a solid foundation to both preventing and rectifying corruption. With such a goal in mind, we plan to use blockchain technology to realize our objective.

In terms of prevention, the benefits of using blockchains to store contractual content are numerous. Their immutable nature prevents data tempering, protecting the validity of signed contracts while its inherent transparency enables mutual monitoring for increased security and between parties. In terms of remedial action, blockchains could be an invaluable tool for streamlining the investigation process to uncover the truth. The unchangeable blockchain could serve as undisputed evidence when it comes to investigating corruption while the enhanced traceability of its data could aid in the efficiency of the investigation. Presented with the potential of blockchain integration, it is our firm belief that blockchain technology is a worthwhile venture to delve into when it comes to cracking down on corruption.

Despite the aforementioned benefits, there are reasons as to why blockchains are not as prevalent as they could be, and it is well within our team's intention to address such weaknesses in our blockchain solution. For our application, one of the most pressing issues with blockchain technology is its energy consumption. On a high level, this is mainly contributed to the consensus mechanism used by the network in order to achieve trustlessness. Additionally, on a more fundamental level, blockchains are typically used in tandem with cryptocurrencies. As such most conventional architecture for blockchain implementation is catered towards financial applications with much less focus on alternative applications, leading to inefficiency. As such, our team hopes to design a blockchain solution that is tailor-made for managing infrastructure projects, with plans including but not limited to coming up with our own proprietary consensus mechanism, experimenting with alternate blockchain setups, and removing unnecessary features while maintaining core blockchain characteristics.

To conclude, it is hoped that our team's blockchain solution can help bring about a preventive and a remedial advantage towards the crusade against corruption within infrastructure projects, enhancing the integrity of the city's backbone. (496 words)