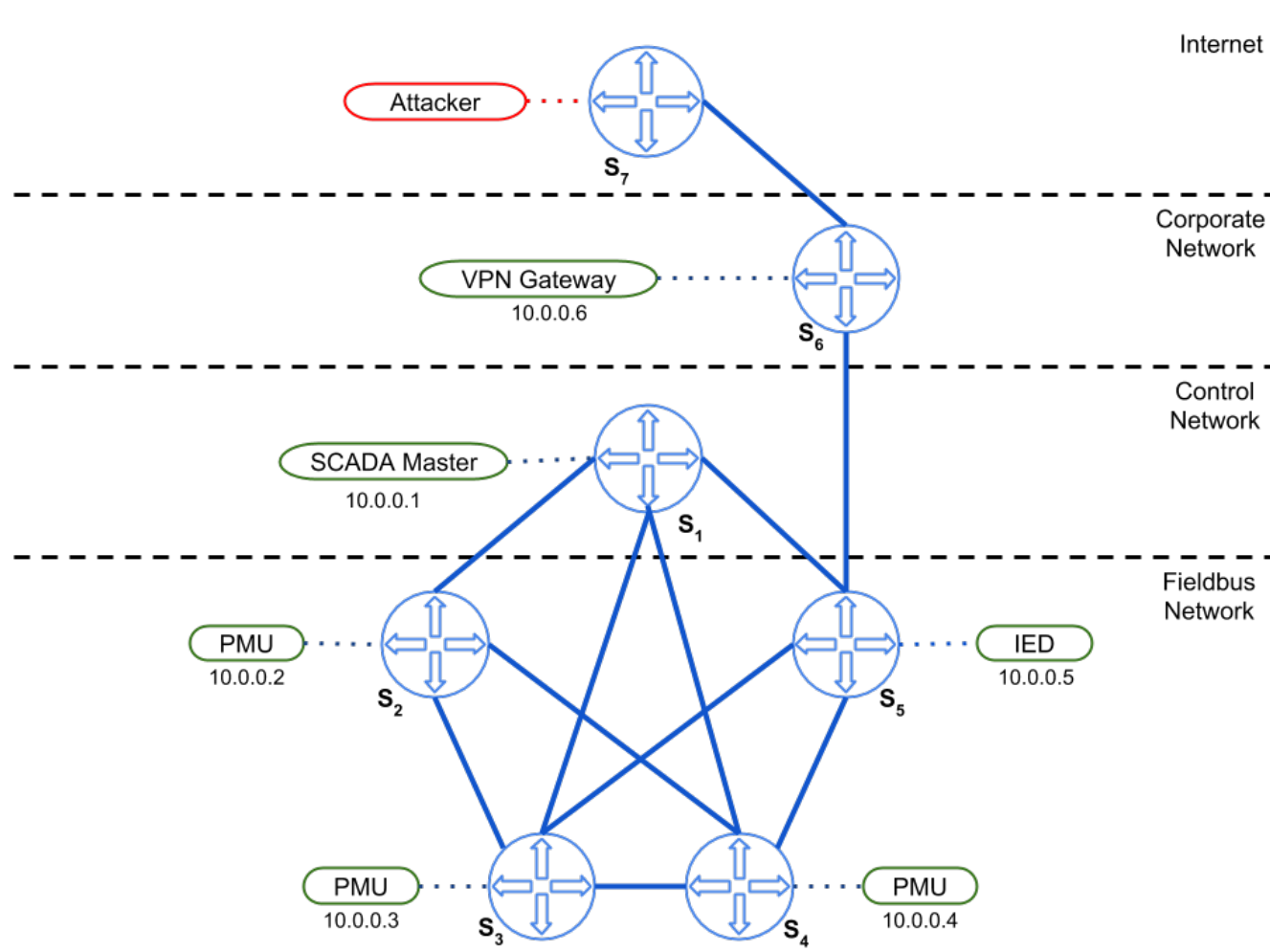


# Castle Keep – An Interactive Demonstration of Networking Concepts

Alexander Monaco, Kartik Palani, Rakesh Kumar, Hoang Hai Nguyen, David Nicol

- **Melody:** A framework capable of synthesizing large data sets.
- **Current visualization** does not capture details such as budget, IDS accuracy, and causality explicitly.
- **Goal:** Develop a tool that can represent this information visually and can be used to make network administration more accessible.

## Approach



## Purpose of Visualizations

- To reduce the amount of mental processing needed to understand information.
- Condense a large amount of information that is something easily digestible.

## Why Tower Defense?

- Budget spending to increase resiliency.
- Design similar to a tree or graph.
- Threat detection and vulnerability assessments are keys to victory.

## Results

### Castle Keep: A Gamification of Network Administration

- Introduces, teaches, and reinforces security concepts through gameplay.
- In game mechanics are allusions to Network Administration

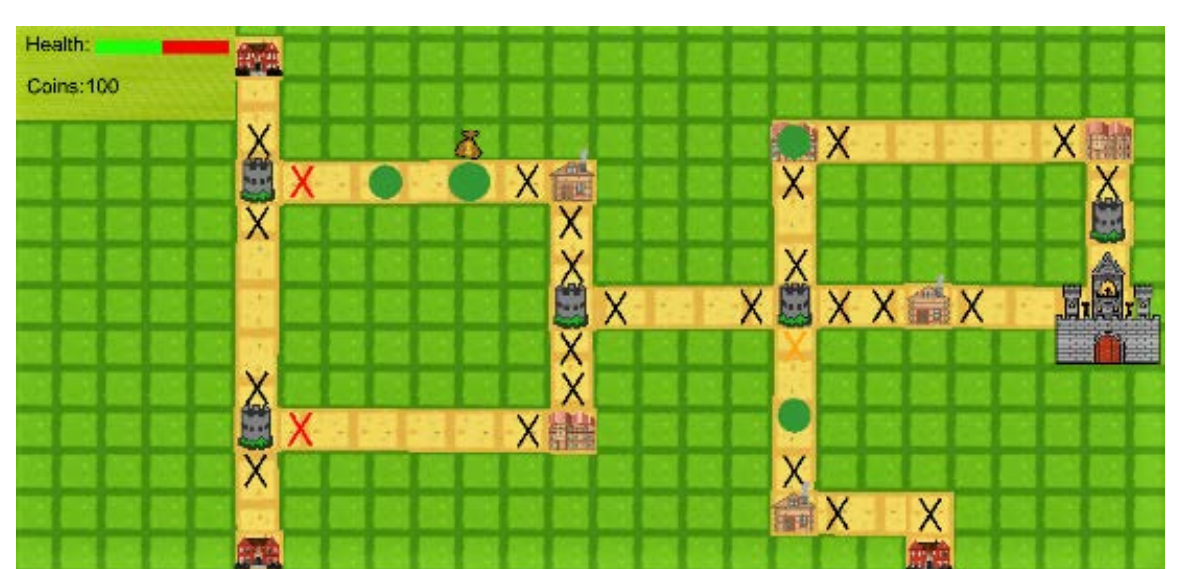
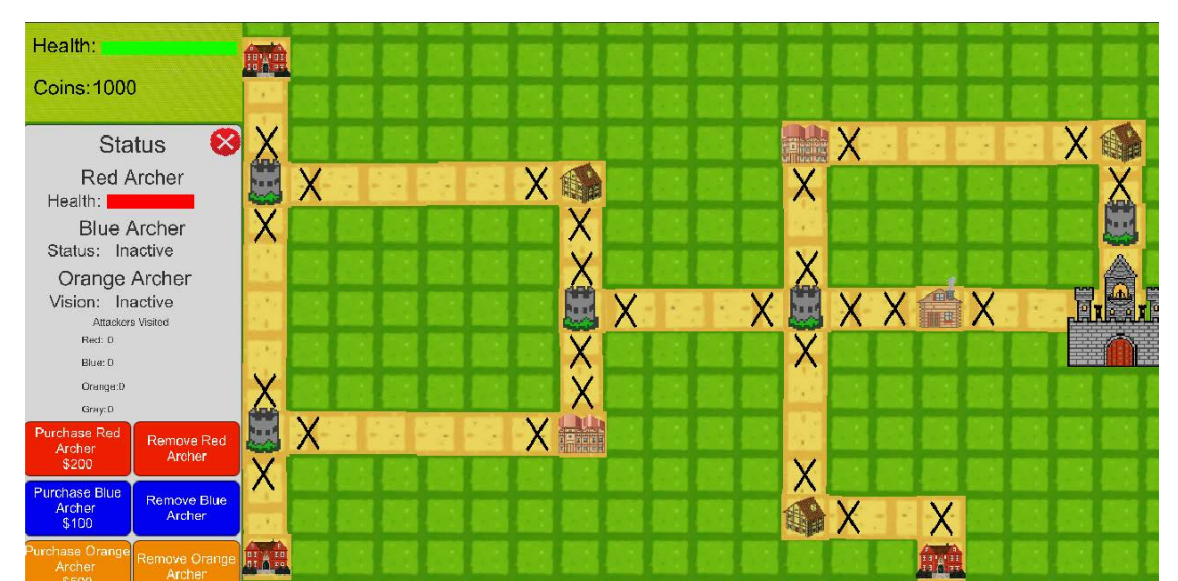
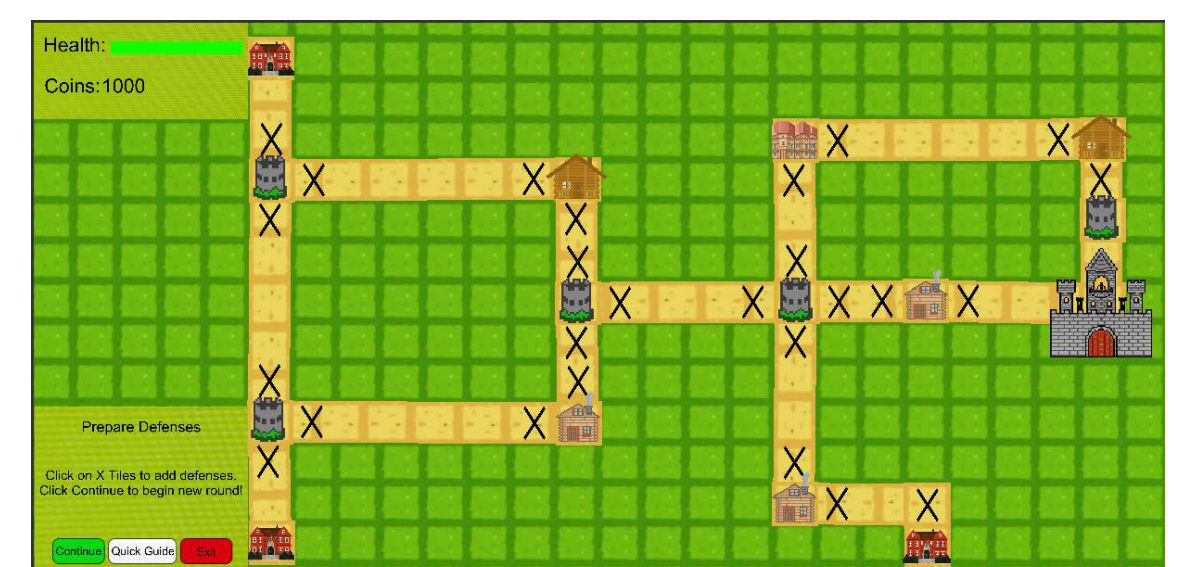
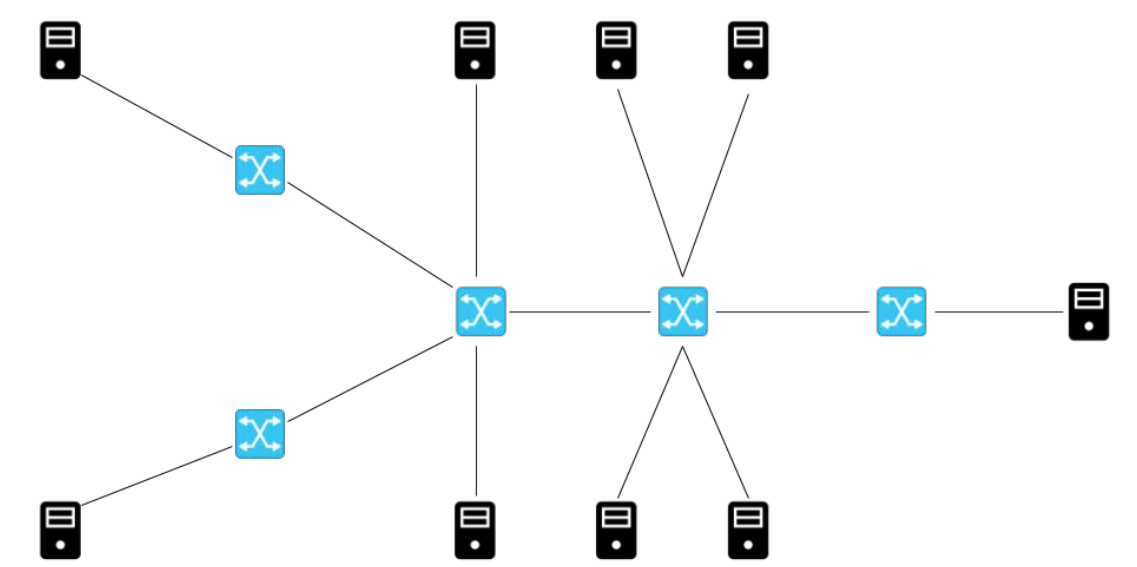
## Conclusion

### A Testable Educational Framework

- Visual cues allow for identification of causality.
- Education through experience.
- Distributable through game hosting websites.

## Future Work

- Current version is capable of recording information regarding player choice and results.
- Aid in understanding of current decision making processes of network admins.
- Use program as an educational tool.



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