# Viva

1. Introduce project:
   1. What?
      1. Cryptocurrencies.
         1. Good.
         2. Bad.
         3. Irrelevancy.
   2. Why?
      1. Human imperfection:
         1. Emotions and biases.
         2. Fatigue and need to eat.
         3. Error.
   3. How?
      1. Market value constantly changing.
      2. Automate trading.
         1. Buy when cheap.
         2. Sell when more expensive.
2. With database:
   1. Oracle database.
   2. Entity Framework Restful API & modifications.
   3. Data collection:
      1. API get requests:
         1. Limitations.
      2. ScheduledExecutorService.
         1. Current.
         2. Historic.
            1. Gaps.
            2. Priority to current collection.
   4. Collection complete:
      1. Merging.
      2. Growth calculation.
      3. Price prediction.
         1. Algorithms.
         2. No outstanding algorithm.
      4. Benchmarking.
         1. Error.
         2. Profit from $100.
      5. User trading.
3. Without database:
   1. Same, longer start up.
   2. Application robustness.
4. JUnit
5. JavaDoc

# Preparation

1. Purge database [if necessary].
2. Ensure database holds minimum data quantity.
3. Pull and test latest version on laptop

# References

### Cryptocurrency/Blockchain Reading

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Swan, M. (2015). *Blockchain*. 1st ed. Sebastopol, CA: O'Reilly.

### GOFAI Strategy

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### Neural Network

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Guresen, E., Kayakutlu, G., and Daim, T. (2011). Using artificial neural network models in stock market index prediction. *Expert Systems with Applications*, 38(8), pp.10389-10397.

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