

UCD SMURFIT GRADUATE SCHOOL OF BUSINESS



NUMERICAL ANALYTICS AND SOFTWARE

Programming Assignment 2

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1 Introduction

2 Theory

2.1 Business Application

2.2 Black-Scholes(-Merton)

2.3 Iterative algorithms / SOR

3 Code Base

3.1 Version Control

Put in something about using GIT, make us look really smart

3.2 Structure / Packages

Brief overview of the code base, hows its structured. Can refer to the below.

```
Sparse-SOR
├── Report
│   ├── Latex files..
│   └── Report.pdf
├── core
│   ├── doMath.py
│   ├── fileIO.py
│   └── tridiagM.py
├── docs
│   ├── input.in
│   └── Background docs..
├── logs
├── tests
│   └── testMain.py
├── main.py
└── README.md
```

3.3 Run Time

How do we run this at runtime? ie how can you modify the inputs / outputs etc

3.4 Testing

Why testings important, how we found it really useful all the way through the assignment (lol). Brief overview of what tests we have included, maybe some specific problem we meet and how testing helped us solve it?

4 Technical Challenges and Limitations

What were the main technical challenges we faced doing this. What are the limitations of our brilliant solution

5 Results

Our fantastic results

6 Conclusions

Appendix

Any figures we want to show

References

- [1] Some Reference