CSE3000 Weekly Progress Presentation

WEEK 3

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What have I done so far?

example:

$n=4,\ f=2,\ \Delta=1 \rightarrow \text{majority} = \left\lceil \frac{4+1}{2} \right\rceil = 3$

weighted voting → $N_V = 5$ ↗ 1 V_{max} ↘ 3 V_{min}

$F_V = f V_{max} = (\Delta + f) V_{min} = 1 \cdot 2 = 2$

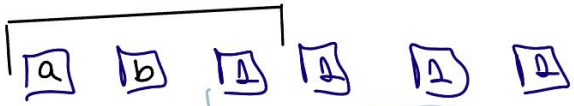
$Q_V = 3$

$n=6,\ f=2,\ \Delta=1 \Rightarrow \text{majority} = \left\lceil \frac{6+1}{2} \right\rceil = 4$

weighted voting → $V_{max} = 1 + \frac{1}{2} = 2.5$

$V_{min} = 1$

$Q_V = 4$



↓ need to remain 1 to keep availability

$a+b+1=4 \Leftrightarrow a+b=3$

↳ weighted voting → each gets half

Progress from last week

Paper

1. Introduction, covering also background and related work of the research.
2. Ongoing writing description of Hotstuff and WHEAT as part of the background.
3. **=> Assignment 1 ACS**

Research

1. Came up with a new multiple weights scheme.
2. Adapted the Python algorithm to emulate this voting mechanism and compared its performance with the binary weighting approach of AWARE.
3. Code Analysis of Hotstuff code repository .
4. Started writing code for Basic Hotstuff to try binary weighting voting.

What is next?

Goals for the week onwards

1. Draft of **Contribution** section.
2. Weighted voting advancements towards a solution, plus finding a way to integrate it in the research.
3. Hotstuff ideally working version of basic version with binary weights.
4. Midterm presentation slides and poster.
5. **Assignment 2a, 2b**

My Questions