

SE 315 – SOFTWARE PROJECT MANAGEMENT
SOFTWARE MEASUREMENTS DOCUMENT

PROJECT NAME: BrightBorn

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Questions to identify measurements:

- 1) How much storage do we need for our dataset?
- 2) What will be the size of our genetic data stored in database?
- 3) What will be the accuracy for calculated results?
- 4) How long it would take to calculate a single possibility?
- 5) How many lines our code will take?
- 6) How long would it take to find the reference genetical information?
- 7) How many reference genomes we need to create?

Identified measurements:

- 1) Dataset storage
- 2) Genom size
- 3) Accuracy and error
- 4) Execution time
- 5) Code size
- 6) Research time
- 7) Accuracy checking and increasing

Measurement storage and collection:

- 1) There will be an initial limit for our dataset storage and each week we will check the dataset storage, if it is close to the limit we will increase the limit.
- 2) Before we start our project, we obtained a schema for genome. We can calculate whole dataset based on that genome instance
- 3) Accuracy will be based on possibility calculations and we will check its error percentage on every iteration.
- 4) We will check the execution time.
- 5) The measurements will be analyzed on a week-to-week basis by comparing last weeks code.
- 6) At the end of each week everyone will report their research time
- 7) If the accuracy error gets too high we will add another reference genome to increase accuracy

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Measurement Type	Description	Example Measurements
Dataset Collection	Size of the dataset	1 Gb
Data Collection	Spesific type of data size	200 Mb
Performance and evaluation	Accuracy calculation	%95
Response time	Execution time measuring	4250 ms
Code Size Measurement	Lines of code	1500 lines
Effort Distribution	Research time	144 hours
Change data	Product growth over time, defects, requirements changes, modules changes.	3 words documents