## PageRanker

- connectivityMatrix: Matrix
- createStochasticMatrix(): Matrix
- createProbabilityMatrix(Matrix &stochasticMatrix): Matrix
- + MARKOV THRESHOLD: constexpr static double
- + PageRanker()
- + PageRanker(const Matrix& connectivityMatrix)
- + loadConnectivityMatrixFromFile(const string& filename): void
- + rankPages(): Matrix

Association

## MatrixSize

- + rows: int
- + cols: int

## Matrix

- matrix: vector<vector<double>>
- + Matrix()
- + Matrix(int n)
- + Matrix(int r, int c)
- + Matrix(const vector<double> &v)
- + Matrix(const Matrix &m)
- ~Matrix()
- + getSize() const: MatrixSize
- + setValue(int row, int col, double val): void
- + getValue(int row, int col) const: double
- + clear(): void

friend ostream & operator << (ostream &out, const Matrix &m)

friend bool opeator== (const Matrix &lhs, const Matrix &rhs)

friend bool operator!= (const Matrix &lhs, const Matrix &rhs)

Matrix& operator++()

Matrix operator++(int)

Matrix& operator--()

Matrix operator--(int)

Matrix& operator=(Matrix rhs)

friend void mySwap(Matrix& m1, Matrix& m2)

Matrix& operator+=(const Matrix &rhs)

friend Matrix operator+(Matrix lhs, const Matrix &rhs)

Matrix& operator-=(const Matrix &rhs)

friend Matrix operator-(Matrix lhs, const Matrix &rhs)

Matrix& operator\*=(const Matrix &rhs)

friend Matrix operator\*(Matrix lhs, const Matrix &rhs)

Matrix& operator \*=(const double rhs)

friend Matrix operator\*(Matrix lhs, const double rhs)