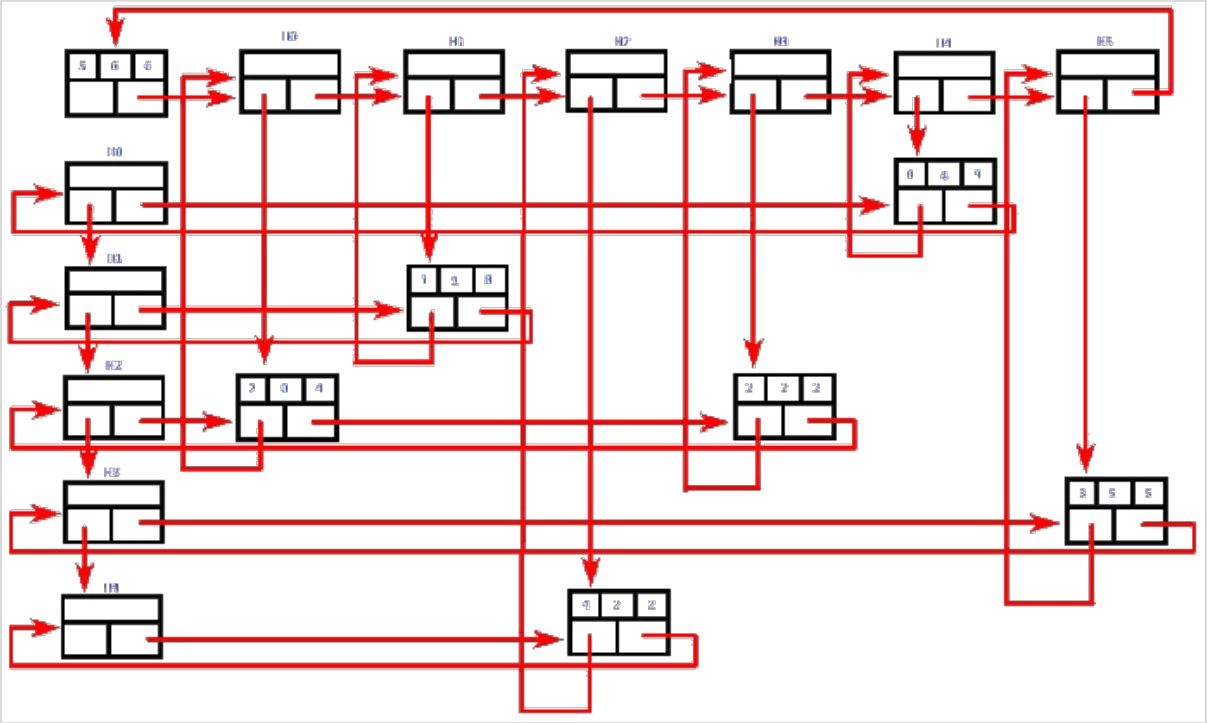
CS2100-Esparza

#CS2100/groups

Work

Realizar la implementación de una matriz esparza. Usando vector y listas circulares.



Example Code

```
template <class T>
class Node {
	public:
		T data;
		int posX;
		int posY;
		Node<T>* next;
		Node<T>* down;
};

template <class T>
class SparseMatrix {
```

```
      private:
              Node<T>* x;
              Node<T>* y;
              int columns;
              int rows;
};
```

Mandatory: (20pts) and Extra: (4pts c/u)

```
int main( int, char * [])
{
    Matrix<double> m1;
    m1 << (2,0,0) << (8,0,1) << (6,1,0) << (100,2,20);  // Insert
    cout << m1 << endl; // print in console
    m1 >> (100,2,20); // delete

    Matrix<double> m2 = Matrix<double>::identity(100,100);
    ofstream _out("res.txt");
    _out << m2 << endl; // print in file
    _out.close();

    cout << mult(m1 * m2) << endl; //  mutiplication
    cout << add(m1 + m2) << endl; // addition
    cout << transpose(m1) << endl; // transpose

    cout << inv(m1 * m2) << endl; // Inversa - Extra!

    // Cargar desde imagen -  Extra (Usar CImg.h)
    Matrix<double> m_image = load_from_image("myimage.jpg");
    m_image = transpose(m_image;
    ofstream _out_i("res.txt");
    _out_i << m_image;
    _out_i.close()
```

```
    return 1;
}
```

Tooling

- Lenguaje C++
- Git + GitFlow + Karma Comments
- Branch per Developer
- Si el código no compila se calificara sobre 11.
- Evitar warnings
- Código limpio ➜ *Keep it short and simple*.

Help!

- Usemos el canal de Slack! (https://bit.ly/2LYbIbh)