ThunderForce

```
std::clock _timeStart
double _timeNow
unsigned char _nbPlayer
unsigned int _nextID
std::vector<Player> _playerList
std::vector<Enemy> _enemyList
std::vector<PBullet> _pBulletList
std::vector<EBullet> _eBulletList
std::vector<Explosion> _explosionList
std::vector<DataEntity_s> _entityBox
```

```
void initGame()
void playerShoot(Player player, PBullet &pBullet)
bool checkHitBoxEnemy(Player player)
bool checkHitBoxEBullet(Player player)
bool checkHitBoxObstacles(Player player)
bool checkHitBoxPBullet(Enemy enemy)
void checkHitBoxs()

void updateExplosion()
void updateEBullet()
void updateEnemy()
void updatePBullet()
void updatePlayer(std::vector<std::vector<unsigned
char>> keyPressedList

std::vector<DataEntity_s> &retrieveDataEntity();
void loadData()
```

Player

```
int _life
usigned int _score
bool _alive;
int _XPosHB
int _YPosHB
```

```
int getXHitBox()
int getYHitBox()
int getXEndHitBox()
int getYEndHitBox()
bool isAlive()

void updateHitBoxPos()
void repopPlayer()
void killPlayer()
```

Entity

```
unsigned int _id
int _XPos
int _YPos
int _XMotion
int _YMotion
```

```
unsigned int getId()
int getXPos()
int getYPos()
int getXMotion()
int getYMotion()

void setPos(int x, int y)
void setXMotion(int x)
void setYMotion(int y)
void resetMotion()
void updatePosition()
```

Enemy

```
bool _alive;
std::clock_t _timeStart
```

```
int getXEndHitBox()
int getYEndHitBox()

double getTime()
```

PBullet

```
bool _charged;
```

```
int getXEndHitBox()
int getYEndHitBox()

bool isCharged()
void setCharged()
```

EBullet

```
bool _charged;
```

```
int getXEndHitBox()
int getYEndHitBox()

bool isCharged()
void setCharged()
```

Explosion

```
std::clock_t _timeStart
```

```
double getTime()
```