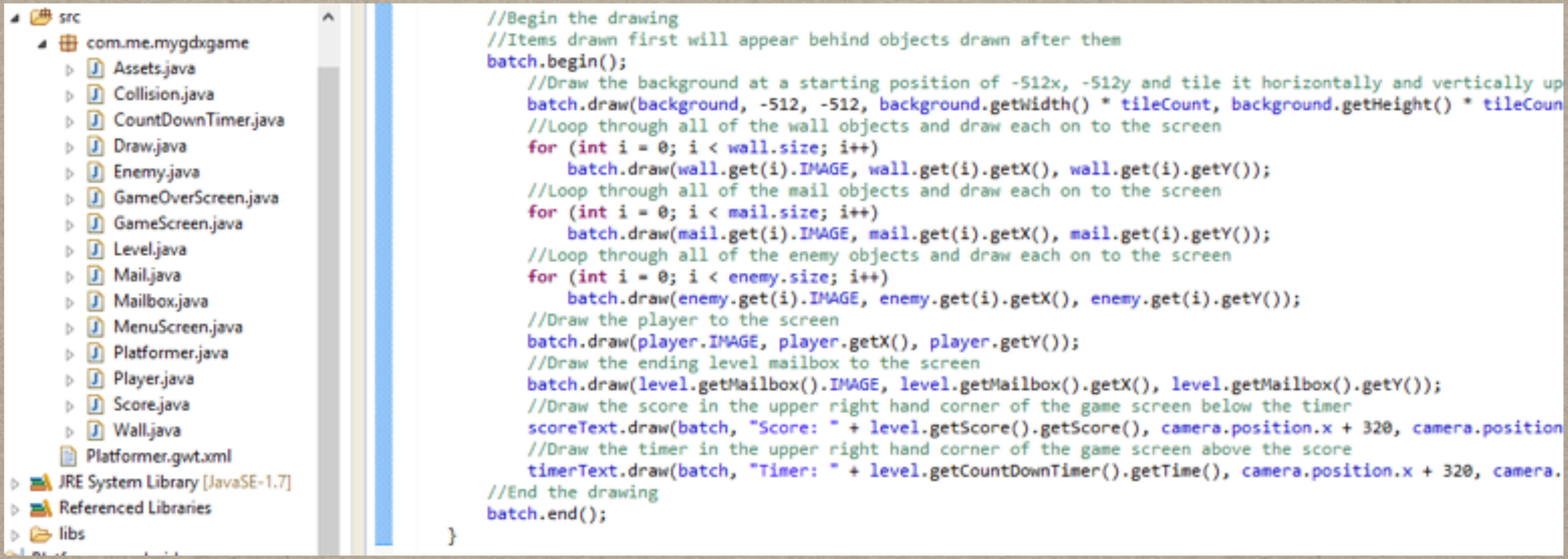
CS 386: TEAM SHADOWFAX

ZOWIE HAUGAARD, LEAH KALUSH, JORDAN HARRIS, JUSTIN LIDDICOAT, SURIM OH

THE PROJECT: LIBGDX

- A library for making desktop and mobile games in the Java programming language
- Integrates with the Eclipse IDE
- Provides user friendly tools to make complex tasks simple

LIBGDX



- src
  - com.me.mygdxgame
    - Assets.java
    - Collision.java
    - CountDownTimer.java
    - Draw.java
    - Enemy.java
    - GameOverScreen.java
    - GameScreen.java
    - Level.java
    - Mail.java
    - Mailbox.java
    - MenuScreen.java
    - Platformer.java
    - Player.java
    - Score.java
    - Wall.java
  - Platformer.gwt.xml
- JRE System Library [JavaSE-1.7]
- Referenced Libraries
- libs

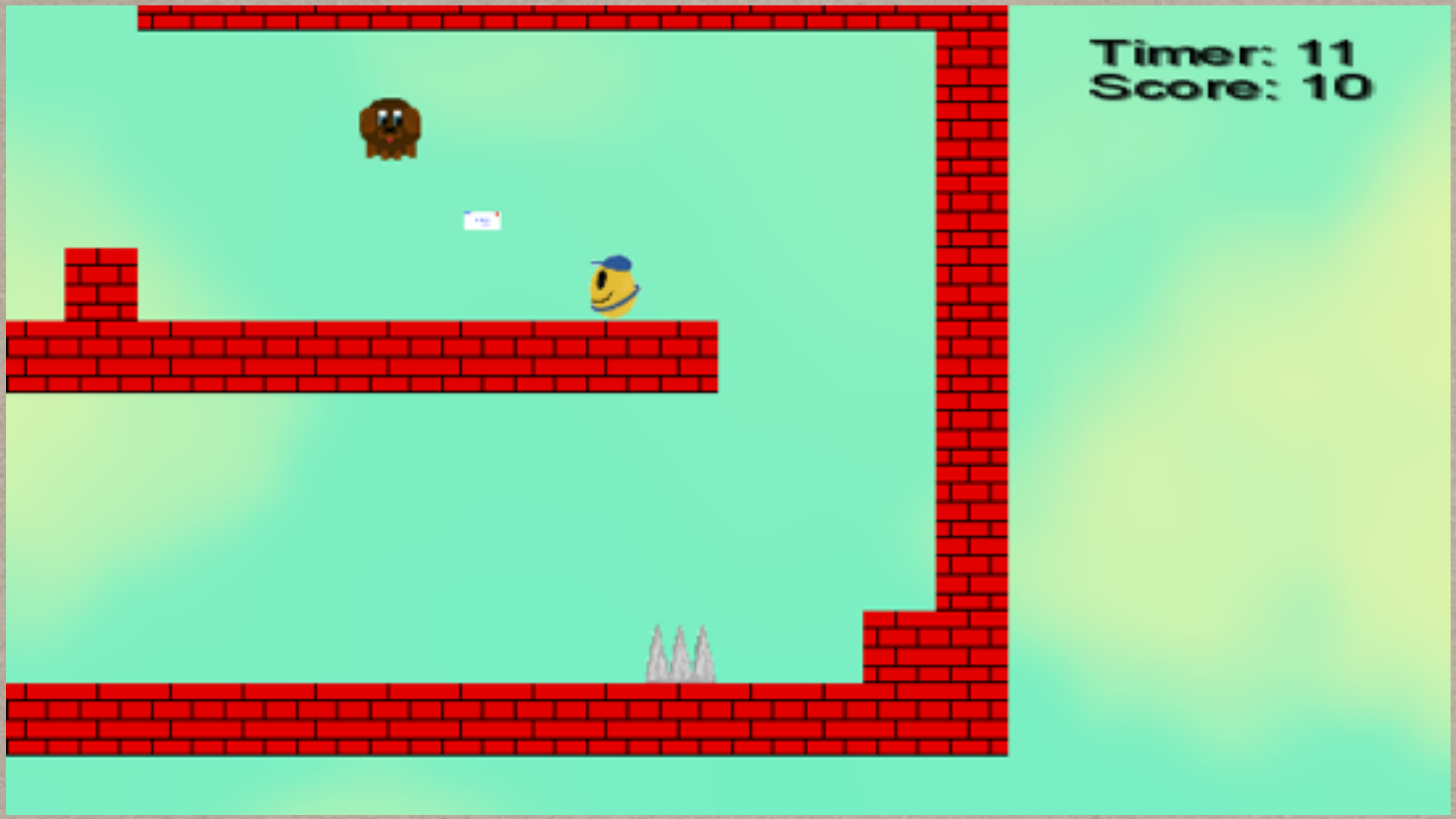
```
        //Begin the drawing
        //Items drawn first will appear behind objects drawn after them
        batch.begin();
            //Draw the background at a starting position of -512x, -512y and tile it horizontally and vertically up
            batch.draw(background, -512, -512, background.getWidth() * tileCount, background.getHeight() * tileCoun
            //Loop through all of the wall objects and draw each on to the screen
            for (int i = 0; i < wall.size; i++)
                batch.draw(wall.get(i).IMAGE, wall.get(i).getX(), wall.get(i).getY());
            //Loop through all of the mail objects and draw each on to the screen
            for (int i = 0; i < mail.size; i++)
                batch.draw(mail.get(i).IMAGE, mail.get(i).getX(), mail.get(i).getY());
            //Loop through all of the enemy objects and draw each on to the screen
            for (int i = 0; i < enemy.size; i++)
                batch.draw(enemy.get(i).IMAGE, enemy.get(i).getX(), enemy.get(i).getY());
            //Draw the player to the screen
            batch.draw(player.IMAGE, player.getX(), player.getY());
            //Draw the ending level mailbox to the screen
            batch.draw(level.getMailbox().IMAGE, level.getMailbox().getX(), level.getMailbox().getY());
            //Draw the score in the upper right hand corner of the game screen below the timer
            scoreText.draw(batch, "Score: " + level.getScore().getScore(), camera.position.x + 320, camera.position
            //Draw the timer in the upper right hand corner of the game screen above the score
            timerText.draw(batch, "Timer: " + level.getCountDownTimer().getTime(), camera.position.x + 320, camera.
        //End the drawing
        batch.end();
    }
```

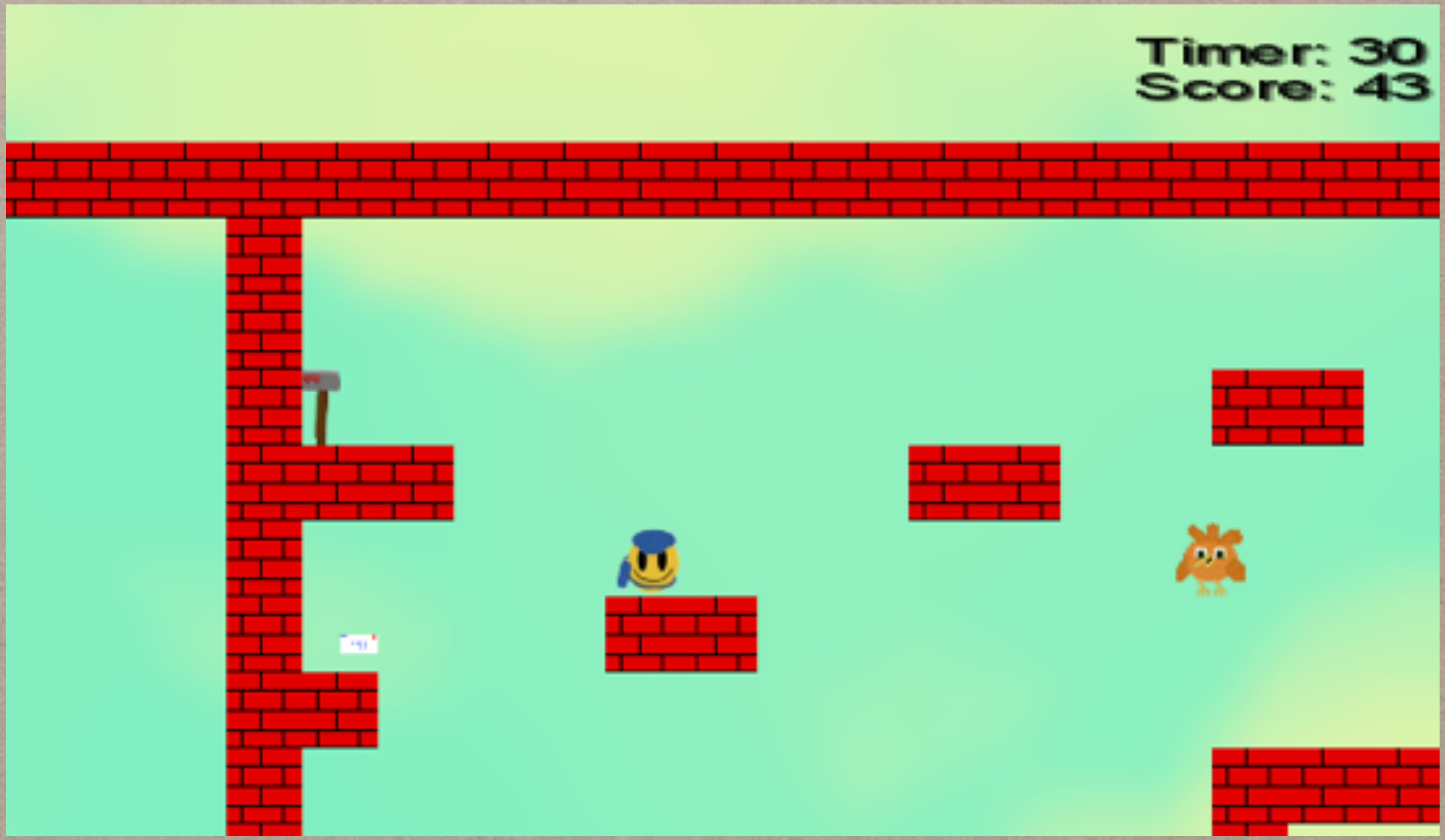
CONTRIBUTION

- We were unable on our own to find a suitable enhancement to add to the project's code base
- Decided to ask the development community for suggestions
- Asked to develop a demo
- Built a game using the LibGDX library to act as a demo project for new users

IMPLEMENTATION

- Simple platform runner game
- Exemplifies how to use LibGDX's tools
- Written so that is an easy starting point for people new to LibGDX


Timer: 11
Score: 10


Timer: 30
Score: 43

CHALLENGES

- Biggest challenge was finding something to work on
- Spent first two weeks trying to identify a contribution
- Once we figured out what to work on, implementation was easy and straightforward

LESSONS LEARNED

- We learned that walking into a developed project with no previous involvement is incredibly difficult
- Documentation is great for learning a system, but working with it is the only way to really understand it