

# Project Troubleshooting

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This document details some fixes to the most common project issues from past semesters relating to Bagel, Maven and IntelliJ. If you run into an error, first check if it is in this document, then check if someone has already posted on Ed and if not, make your own post on Ed :)

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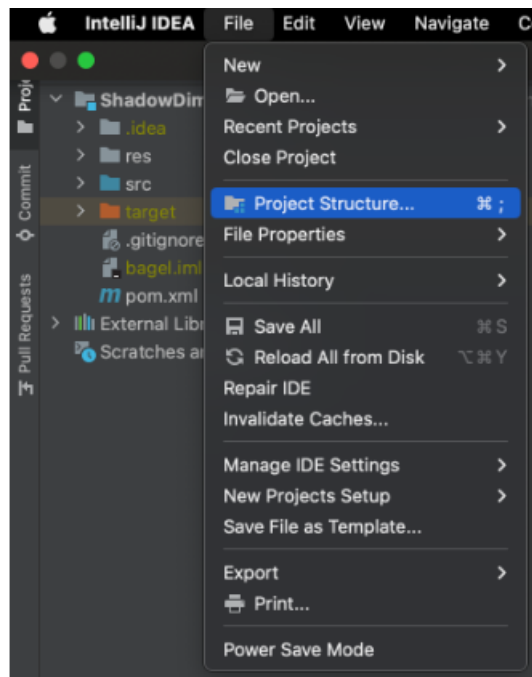
## 1 Failing to run Bagel on a Macbook

An example of the error message is show below.

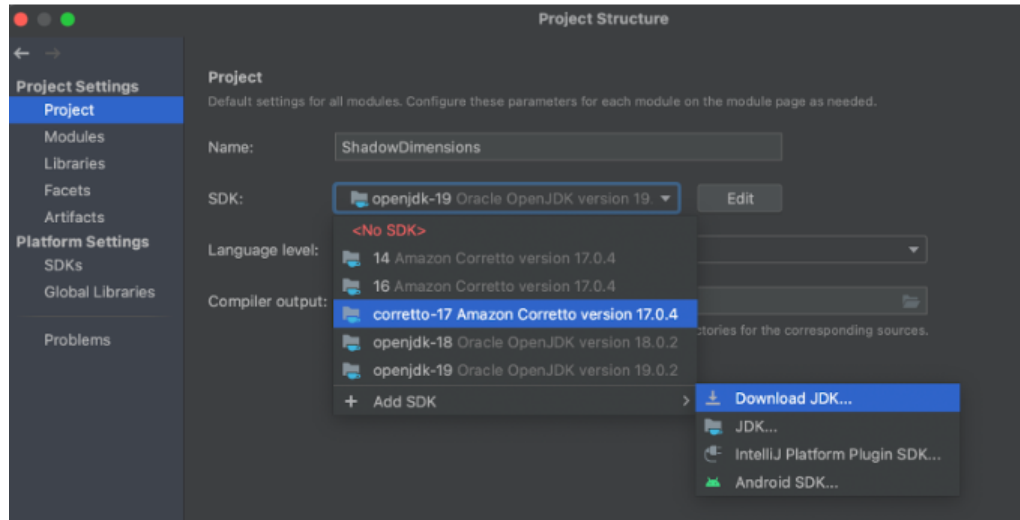
```
/Users/stella/Library/Java/JavaVirtualMachines/openjdk-19.0.2/Contents/Home/bin/java ...  
Error: Main method not found in class bagel.AbstractGame, please define the main method as:  
    public static void main(String[] args)  
or a JavaFX application class must extend javafx.application.Application  
  
Process finished with exit code 1
```

**Solution:** Use Java 16 or 17. If these don't work, try lower versions.

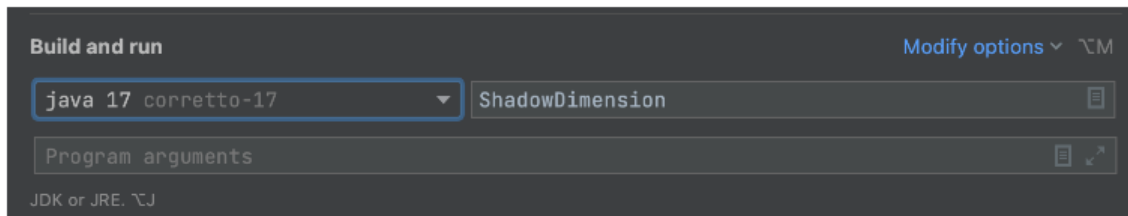
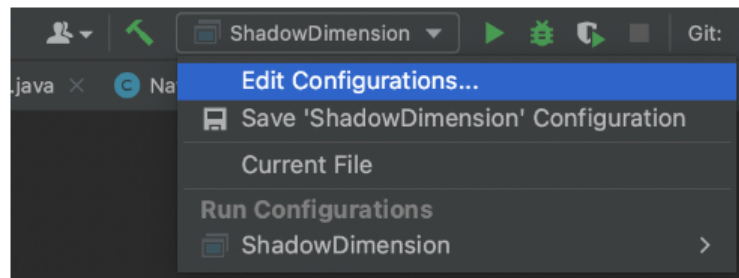
- Go to File → Project Structure...



- Choose a 17/16 SDK or download one (Add SDK → Download JDK...) shown on the next page.



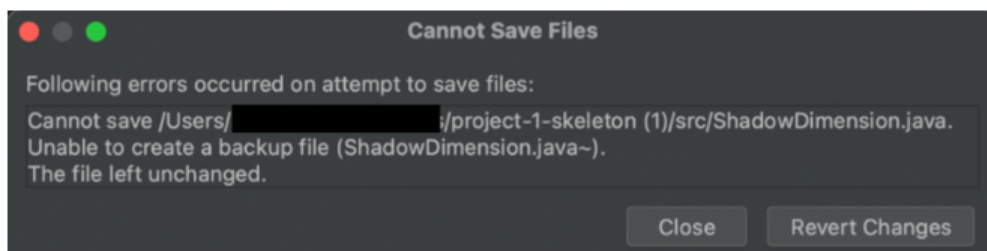
- Make sure the correct JDK is selected (Edit configurations → Build and run)



## 2 Errors when saving files

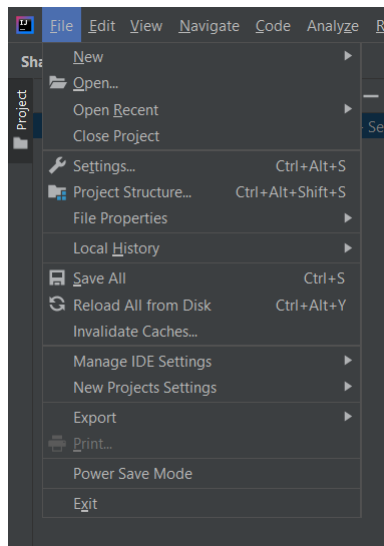
### 2.1 Unable to create a backup file

An example of the error message is show below.

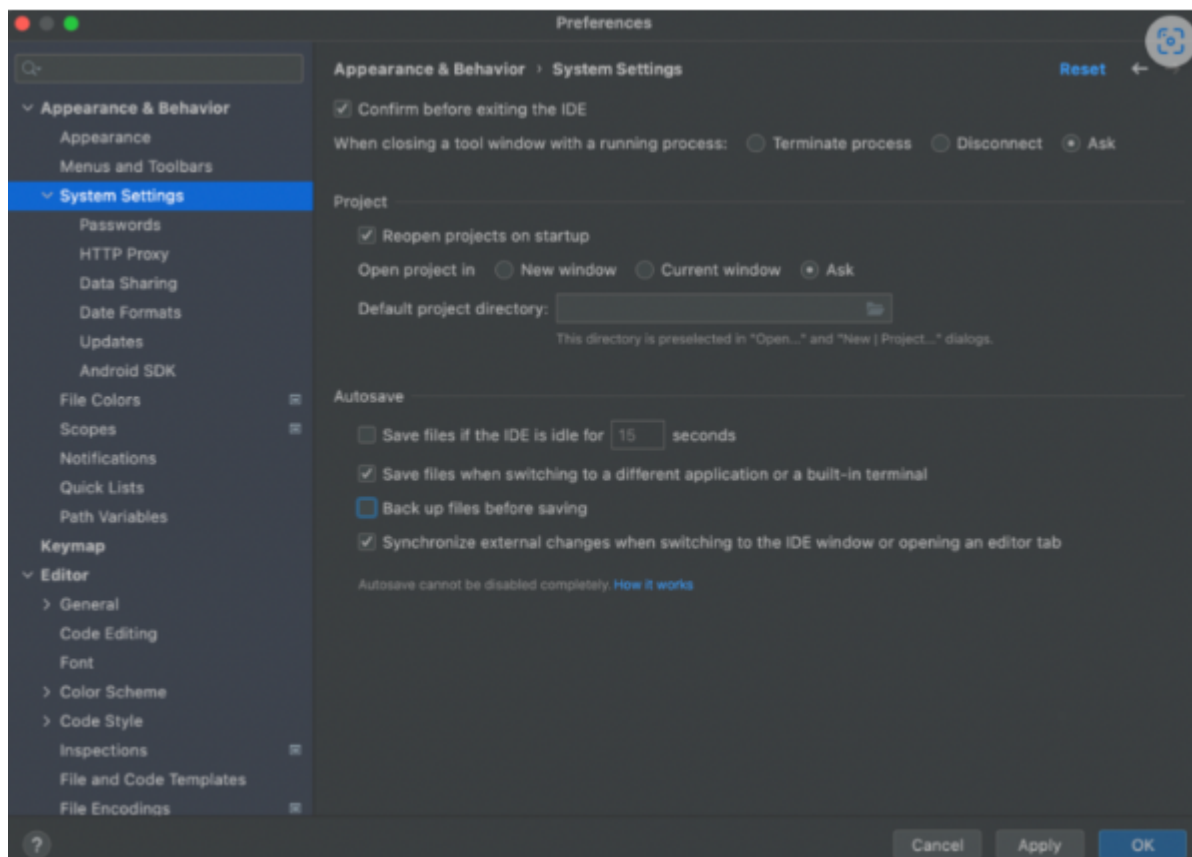


**Solution:**

- Turn off the file backup by going to **File** → **Settings...** (sometimes called **Preferences**.)

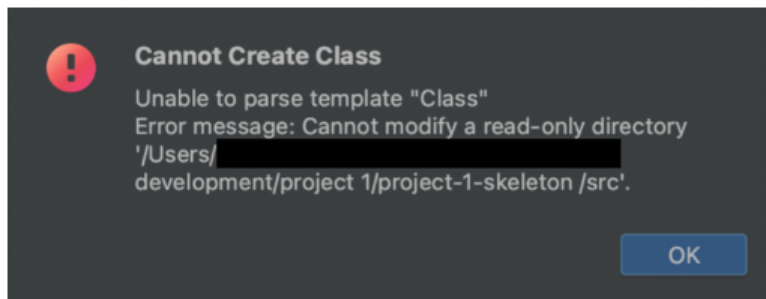


- Turn off "Back up files before saving" in System Settings.



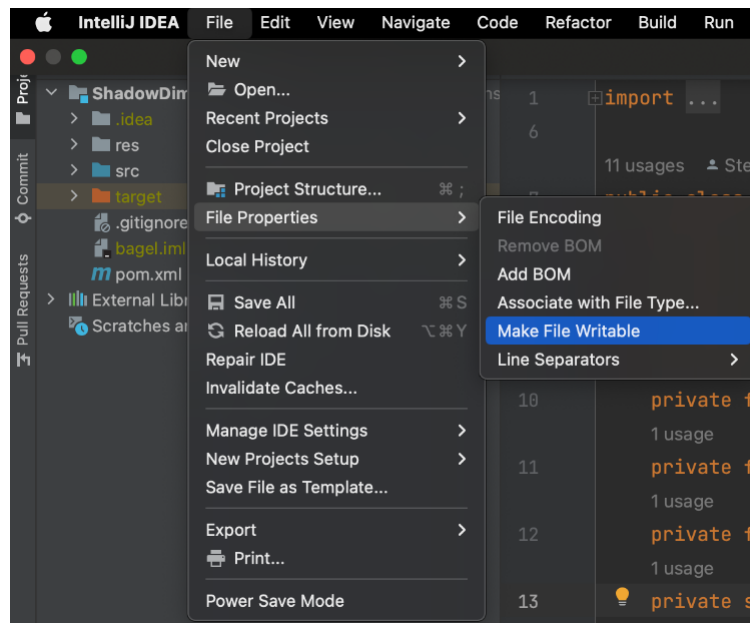
## 2.2 Cannot modify a read-only directory

An example of the error message is shown below.

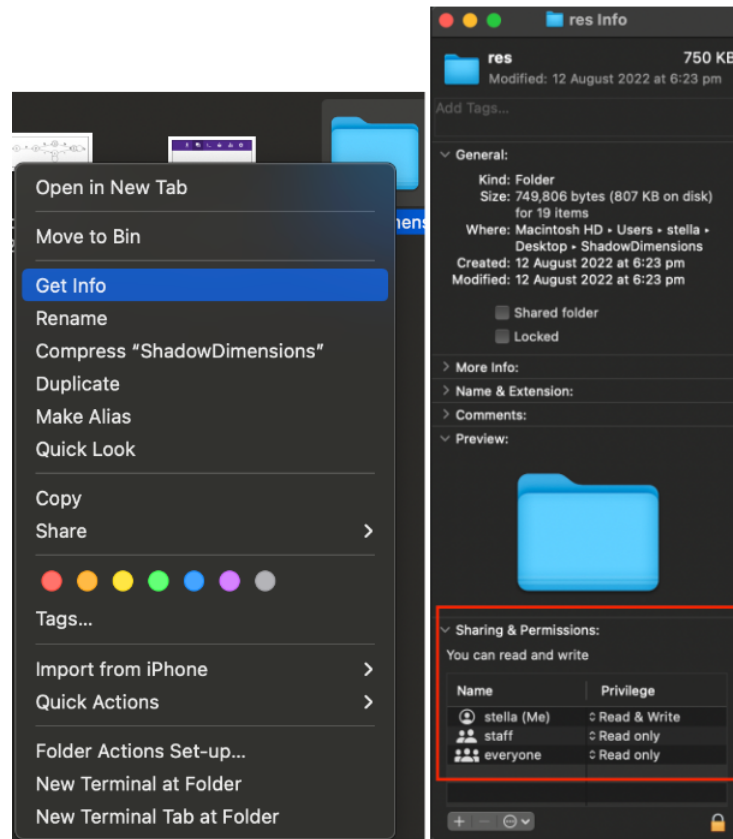


**Solution:** Make your project writable.

- Make file writable by going to **File** → **File Properties** → **Make File Writable**



- If the above doesn't work, right click on the folder in Finder → **Get info** → **Sharing and Permissions**. Change your permissions to **Read & Write** as shown on the next page.



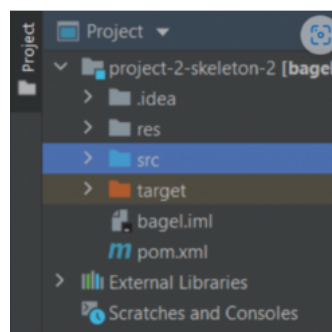
### 3 Error loading images/files

An example of the error message is show below.

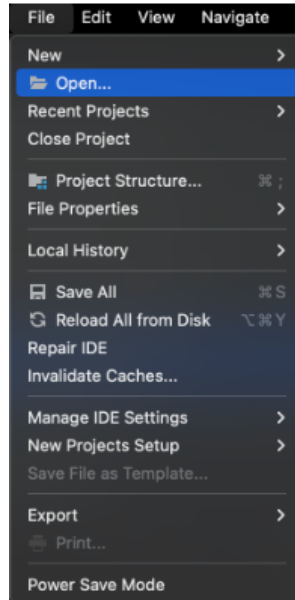
```
Bagel v1.9.3 (August 13th, 2020)
Exception in thread "main" bagel.BagelError: Create breakpoint : Error loading image: File res/background0.png not found (full path:
    at bagel.TextureManager.getTexture(TextureManager.java:41)
    at bagel.Image.<init>(Image.java:21)
    at Level.<init>(Level.java:30)
```

#### Solution:

- Open the project at the correct directory level like below. There shouldn't be another folder on top of your project folder.



- If needed, open the correct folder by going to **File** → **Open**.



## 4 UnsatisfiedLink Error

An example of the error message is show below.

```
Exception in thread "main" java.lang.UnsatisfiedLinkError:
/private/var/folders/81/lbszhy9x2tsfcgmg3rl2606r0000gn/T/lwjgluser/3.2.2-build-10/liblwjgl.dylib:
dlopen(/private/var/folders/81/lbszhy9x2tsfcgmg3rl2606r0000gn/T/lwjgluser/3.2.2-build-10/liblwjgl.dylib, 0x0001): tried:
'/private/var/folders/81/lbszhy9x2tsfcgmg3rl2606r0000gn/T/lwjgluser/3.2.2-build-10/liblwjgl.dylib' (mach-o file, but is an
incompatible architecture (have 'x86_64', need 'arm64e'))
```

**Solution:** Make sure you have the latest `pom.xml` file from the `project-1-skeleton` zip file which uses version **3.3.1** of `lwjgl`. The correct `pom.xml` file should include the following line:

```
<lwjgl.version>3.3.1</lwjgl.version>
```

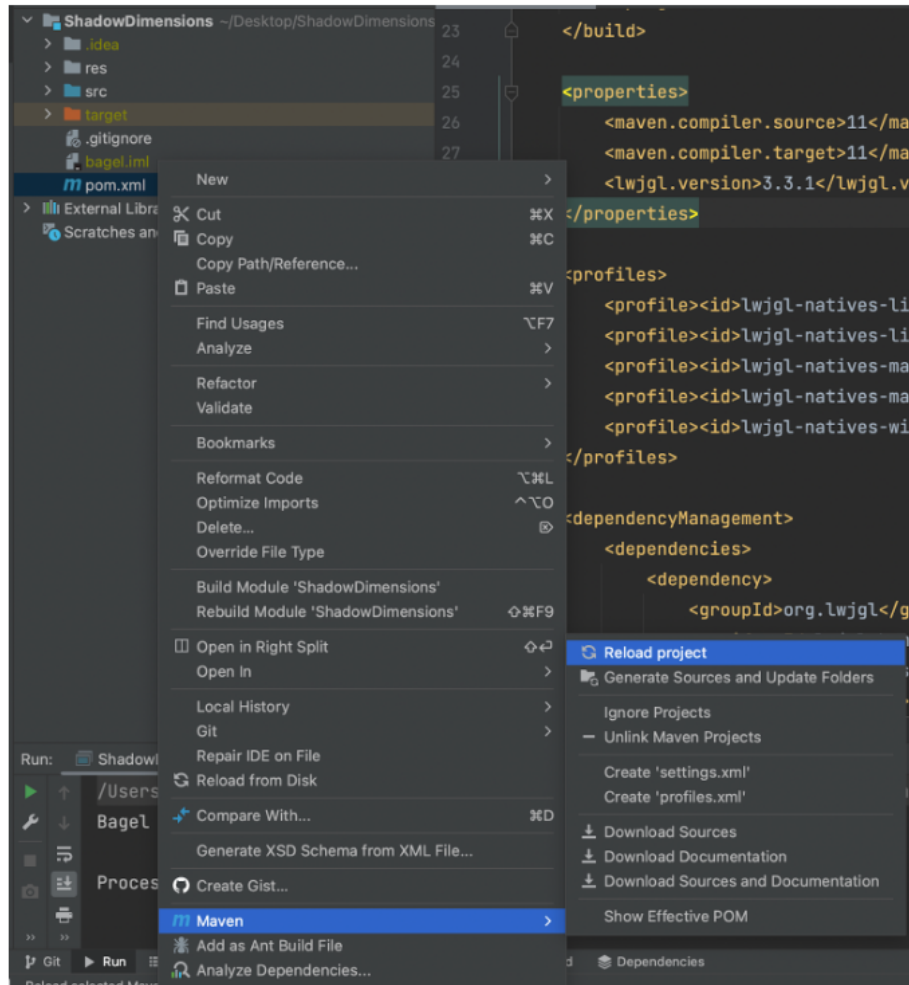
Then follow the steps in the next section to reload the dependencies.

## 5 Error with Dependencies/Bagel class not found error

The error message will mention either `Maven` or `dependencies` or that the `Bagel` class cannot be found.

**Solution:** Reload the Maven dependencies in IntelliJ by:

- Right clicking on pom.xml → Maven → Generate Sources and Update Folders
- Right clicking on pom.xml → Maven → Reload project



## 6 Missing lwjgl-3.3.1.jar file error

Ask a tutor to send you the .jar file you are missing and place it in the right folder.

For Mac users: /Users/<your mac username>/Library/Developer/Shared/Repositories/SourceCache/org.lwjgl.lwjgl-3.3.1