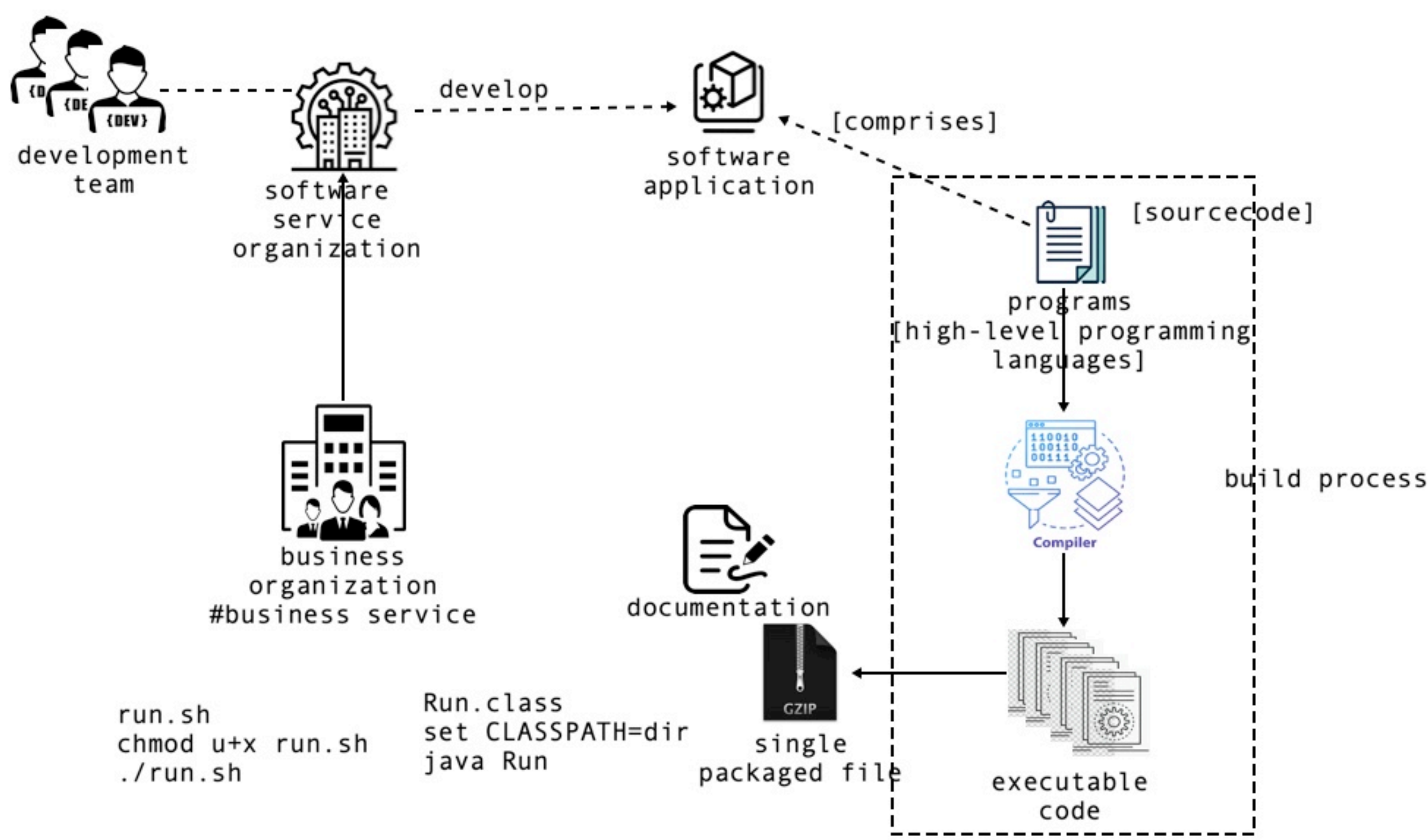


distribute the software application

upon developing the software application by writing the sourcecode programs, the developer cannot distribute the sourcecode of the application to the enduser, because the sourcecode is not executable and enduser dont know how to build the sourcecode to produce the executable code.

So its the responsibility of the developers by themself in building the sourcecode by compiling it through compilers and generate the executable code. But the executable code cannot be distributed to the enduser as it has lot of problems as described below:



problems: in delivering the executable code to the end user

1. not all the programs can be directly executable, out of the programs we delivered, there will be only one program that acts as an entryptoint program for the whole application, that needs to be triggered/executed to run the software application

such information about the entry point programs that needs to run, to launch the application is only known to the developer, and the enduser doesnt have any information about it. So even thought we delivery these executable programs, enduser cannot launch the application

2. We cannot ship these bunch of executable files/programs to the enduser, we need to collect together all the application programs into a folder and should deliver as one single unit. But the folders are not transferable and sending individual files is very difficult, so how to deliver or distribute the software application

3. even though we delivered these bunch of executable programs to the enduser/business organization somehow, the enduser will not be able to launch the program. Because different programs written in different programming languages has to be executed differently.

For eg..

incase of shellscript programs:

1. The enuser has to grant execute permission to the program file
chmod u+x run.sh
2. run the program file by passing program filename as an input to the bash interpreter as below
./run.sh

incase of java program:

1. we need to set the CLASSPATH pointing to the directory of the application
export CLASSPATH=appdir

2. pass the main program name as an input to the jvm (java runtime engine)
java Run

The specific details of how to launch or run the program is not known to the enduser.

approach#1

The developers upon building and generating the executable code of the application, they can package the whole application into one single distributable file using packaging standards like tar.gz or zip etc. Along with this to help the enduser in running the application the programmer/developer can write documentation describing the details of

1. entryptoint program
2. steps in running the applications

and provide this to the enduser

since the enduser has packaged executable application and documentation with instructions on launching the application he/she can able to use the application.

Inorder to use the software application that is delivered above:

1. the enduser has to first unpack the software application by using tar/zip utilities. So the enduser has to install the appropriate zip utility software based on packaging standard in which the application has been packaged and unzip its contents into a directory location

2. read through the instructions that is provided by the developer in understanding how to run the application and what is the entryptoint program in launching the application

These instructions differs based on the programming language in which the application has been developed, so excessive care should be taken in understanding and following the instructions in running the application

From the above we can understand there are several problems in using the application

1. these packaging standards are specific to the operating system platform and hence needs to download/use appropriate distribution
2. need to unpack the software first inorder to use it, which requires additional tools/utilities needs to be installed by the enduser
3. the enduser has to throughly gothru the documentation in understanding the instructions in running the application
4. whenever there is change in the software application with new versions being released, like entryptoint program etc, again the enduser has to go thru the documentation in understanding and launching

looks like it is painful job for an enduser in using the application, thus making the software distribution/delivery very complex.

From the above we can understand, running the software application on the underlying operating system of the computer is very complex thus making it merely un-usable.