

1 Initialization Blocks Handler

1.1 Handler Algorithm

Algorithm 1: Handle	
Input: L, B, R, M	
1	$A_L \leftarrow \{l \in L \mid (\neg \exists b \in B)(l.id = b.id)\};$
2	$A_R \leftarrow \{r \in R \mid (\neg \exists b \in B)(r.id = b.id)\};$
3	$D_B \leftarrow \{b \in B \mid (\neg \exists l \in L)(b.id = l.id) \wedge (\neg \exists r \in R)(b.id = r.id)\};$
4	$IB_L \leftarrow \{n \in A_L \mid n.type = INITBLOCK\};$
5	$IB_R \leftarrow \{n \in A_R \mid n.type = INITBLOCK\};$
6	$IB_B \leftarrow \{n \in D_B \mid n.type = INITBLOCK\};$
7	$matches \leftarrow \emptyset;$
8	if $ IB_L = 1 \wedge IB_B = 1 \wedge IB_R = 1$ then
9	$matches \leftarrow matches \cup (IB_{L_1}, IB_{B_1}, IB_{R_1});$
10	else
11	foreach $b \in IB_B$ do
12	$l \leftarrow findFirst(l \in IB_L \rightarrow l.body \approx b.body);$
13	$r \leftarrow findFirst(r \in IB_R \rightarrow r.body \approx b.body);$
14	$IB_L \leftarrow IB_L - l;$
15	$IB_R \leftarrow IB_R - r;$
16	if $l \neq null \wedge r \neq null$ then
17	$matches \leftarrow matches \cup (l, b, r);$
18	end
19	end
20	foreach $l \in IB_L$ do
21	$r \leftarrow findFirst(r \in IB_R \rightarrow r.body \approx l.body);$
22	$IB_R \leftarrow IB_R - r;$
23	if $r \neq null$ then
24	$matches \leftarrow matches \cup (l, null, r);$
25	end
26	end
27	end
28	foreach $(l, b, r) \in matches$ do
29	$m \leftarrow find(m \in M \rightarrow m.body = l.body);$
30	$m.body \leftarrow textualMerge(l.body, b.body, r.body);$
31	$m \leftarrow find(m \in M \rightarrow m.body = r.body);$
32	$removeNode(m, M);$
33	end